ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS: CASE STUDIES

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

Bachelor of Technology
in
Mining Engineering

By

SUDIP DAS

Roll: 10605038

DEPARTMENT OF MINING ENGINEERING

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

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Under the guidance of

Prof. D.P.TRIPATHY

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Rourkela

CERTIFICATE

This is to certify that the thesis entitled **"ANALYSIS AND INTERPRETATION FINANCIAL STATEMENTS: CASE STUDIES"** submitted by Sri Sudip Das, Roll No: 10605038 in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Mining Engineering at the National Institute of Technology, Rourkela (Deemed University) is an authentic work carried out by him under my supervision and guidance.

To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/Institute for the award of any Degree or Diploma.

Date: **(Prof. D.P. TRIPATHY)**

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Date: **(Sudip Das)**

ABSTRACT

Financial statements are formal records of the financial activities of a business, person, or other entity and provide an overview of a business or person's financial condition in both short and long term. They give an accurate picture of a company’s condition and operating results in a condensed form. Financial statements are used as a management tool primarily by company executives and investor’s in assessing the overall position and operating results of the company.

Analysis and interpretation of financial statements help in determining the liquidity position, long term solvency, financial viability and profitability of a firm. Ratio analysis shows whether the company is improving or deteriorating in past years. Moreover, Comparison of different aspects of all the firms can be done effectively with this. It helps the clients to decide in which firm the risk is less or in which one they should invest so that maximum benefit can be earned.

Mining industries are capital intensive; hence a lot of money is invested in it. So before investing in such companies one has to carefully study its financial condition and worthiness. Unfortunately very limited work has been done on analysis and interpretation of financial statements of Indian for mining companies. An attempt has been carried out in this project to analyze and interpret the financial statements of five coal and non- coal mining companies.

OBJECTIVES

- To understand, analyze and interpret the basic concepts of financial statements of different mining companies.
- Interpretation of financial ratios and their significance.
- Development of programs in C++ for calculation of different financial statements and financial ratios.
- Use of Tally 9.0 package for the analysis and interpretation of financial statements of mining companies.

This project mainly focuses in detail the basic types of financial statements of different companies and calculation of financial ratios. Ratio analysis of five companies viz. ACC Ltd, Tata Steel, Jindal Steel & Power Limited, Hindustan Zinc Ltd. (HZL) and Gujarat Mineral Development Corporation (GMDC) was done.

Computer programs were developed in Turbo C++ for the preparation/analysis of different financial statements and ratios. However, only eleven ratios could be calculated with it. In near future the program can be upgraded to calculate more ratios.

Tally 9.0 was used for preparation of balance sheet, profit & loss statements and estimation of few financial ratios of selected companies. Profit & Loss Statements of companies were not calculated as Tally 9.0 has limitations in processing the data that was available. However, only three ratios viz. current ratio, quick ratio and debt-equity ratio were calculated. An advanced version can be developed for calculation of profit & loss statements and other financial ratios.

From ratio analysis of Balance Sheet and P & L Statement of ACC Ltd. of 2007-09 it was concluded that liquidity position of the company is not good. Current ratio, debt-equity ratio, quick ratio, net profit margin, operating profit margin, gross profit margin, return on assets, return on investments and return on capital employed were found to be unacceptable.

Short term liquidity position of JSPL in 2007 was good. However, current ratio, quick ratio, net profit margin, return on assets, return on investments and return on capital employed were unsatisfactory. The ratios that were found to be desirable are debt-equity ratio, operating profit margin and gross profit margin. In 2008-09, net working capital available with the company was adequate. The ratios that were found to be satisfactory are quick ratio, debt-equity ratio, return on investments, return on net worth, operating profit margin and gross profit margin. Current ratio, return on capital employed, return on assets and net profit margin of the company were unacceptable.

For Tata Steel in 2007, net working capital, quick ratio, return on investments, return on net worth, operating profit margin and gross profit margin of the company were satisfactory. However, debt-equity ratio, current ratio, net profit margin, return on capital employed and return on assets were undesirable. In 2008, only company’s current ratio improved due to substantial increase in current assets position. In 2009, net working capital available was inadequate. Company's debt-equity ratio, operating profit margin and gross profit margin were desirable and current ratio, return on investments, return on net worth, return on capital employed and return on assets were found to be unsatisfactory.

Short term liquidity position of HZL was good in 2007. The ratios that were found to be satisfactory are operating profit margin, gross profit margin, net profit margin, return on capital employed, return on assets and return on net worth. Current ratio, quick ratio and debt-equity ratio were undesirable. In 2008, current assets position improved further that resulted in better current ratio and quick ratio. Debt-equity ratio was very low due to less investment. In 2009, return on capital employed, return on assets, return on investment and return on net worth remained unsatisfactory.

For GMDC in 2007, net working capital available was adequate. Quick ratio, debt-equity ratio, operating profit margin and gross profit margin of the company was also desirable. However company's net profit margin, return on capital employed, return on assets, return on investment and return on net worth were undesirable. In 2008 & 2009, only debt-equity ratio of the company decreased as the debts have been cleared.

In this project, comparison of different ratios viz. current ratio, debt-equity ratio, net profit margin and return on investment of all the above e companies has been done for the period 2004-09.It was observed that current ratio of ACC Ltd. was always less than 1 from 2004 -09 which indicates that liquidity position of the company was not good. Current ratio of Jindal Steel & Power Ltd. and HZL was satisfactory as it remained more than 1 for all the five years. Liquidity position of Tata steel was not satisfactory as the ratio varied marginally from 0.71 to 0.97 in five years whereas current ratio of GMDC decreased from 2.48 to 1.26.

D-E ratio of ACC Ltd. decreased from 0.5 to 0.07 from 2004 -07 and then increased to 0.09 in 2009 which indicates the debts have been cleared. Debt position of JSPL was satisfactory as the ratio varied from 1.13 to 0.91 from 2004-09. GMDC's D-E ratio was 1.45 from 2004-07 because of increasing investment and then came down to 0.39. However D-E ratio of Tata Steel & HZL was less than 1 in five years as their debts were paid off.

From 2004-09, net profit margin of HZL increased from 29.9% to 47.9%. It remained the most profit making company compared to others due to their substantial increase in sales. Profitability of ACC Ltd. varied marginally from 17.28% to 20.03%. Profit Margin of GMDC came down from 28.04% in 2004-05 to 23.6% in 2008-09. Though sales of the company JSPL, Tata Steel and GMDC increased, their profit percentage decreased from 2004-09 due to their decrease in net profit.

ROI of ACC Ltd. increased from 18.16% to 37.7% in five years due to substantial increase in its profit before tax. Similarly, ROI of GMDC increased marginally from 22.41% to 30.97% in five years. From 2004- 06, ROI of HZL increased from 43.04% to 83.30% and in 2009 it declined to 22.69%. ROI of Tata Steel was highest in 2004-05 with 74.57% and then it declined to 23.62%. Similarly ROI of JSPL decreased from 52.31% to 39.44%.

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CHAPTER- 01

INTRODUCTION

Financial statements are records that provide an indication of the organization's financial status. It quantitatively describes the financial health of the company. It helps in the evaluation of company's prospects and risks for the purpose of making business decisions. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements should be understandable, relevant, reliable and comparable. They give an accurate picture of a company's condition and operating results in a condensed form. Reported assets, liabilities and equity are directly related to an organization's financial position whereas reported income and expenses are directly related to an organization's financial performance. Analysis and interpretation of financial statements helps in determining the liquidity position, long term solvency, financial viability, profitability and soundness of a firm. There are four basic types of financial statements: balance sheet, income statements, cash-flow statements, and statements of retained earnings.

Mining industries are capital intensive. Hence a lot capital is invested in it. Unfortunately very limited work has been done on analysis and interpretation of financial statements of Indian for mining companies. An attempt has been carried out in this project to analyze and interpret the financial statements of five coal and non- coal mining companies.

1.1 OBJECTIVES

- To understand, analyze and interpret the basic concepts of financial statements of different mining companies.
- Interpretation of financial ratios and their significance.
- Development of programs in C++ for calculation of different financial statements and financial ratios.
- Use of Tally 9.0 package for the analysis and interpretation of financial statements of mining companies.

CHAPTER -02

FINANCIAL STATEMENTS

Financial statements (or financial reports) are formal records of the financial activities of a business, person, or other entity. Financial statements provide an overview of a business or person's financial condition in both short and long term. All the relevant financial information of a business enterprise, presented in a structured manner and in a form easy to understand is called the financial statements. There are four basic financial statements:

1. **Balance sheet**: It is also referred to as statement of financial position or condition, reports on a company's assets, liabilities, and Ownership equity as of a given point in time.
2. **Income statement**: It is also referred to as Profit and Loss statement (or "P&L"), reports on a company's income, expenses, and profits over a period of time. Profit & Loss account provide information on the operation of the enterprise. These include sale and the various expenses incurred during the processing state.
3. **Statement of Retained Earnings**: It explains the changes in a company's retained earnings over the reporting period.
4. **Cash Flow Statement**: It reports on a company's cash flow activities, particularly its operating, investing and financing activities.

2.1 BALANCE SHEET

In financial accounting, a balance sheet or statement of financial position is a summary of a person's or organization's balances. A balance sheet is often described as a snapshot of a company's financial condition. It summarizes a company's assets, liabilities and shareholders' equity at a specific point in time. These three balance sheet segments give investors an idea as to what the company owns and owes, as well as the amount invested by the shareholders. Of the four basic financial statements, the balance sheet is the only statement which applies to a single point in time.

A company balance sheet has three parts: assets, liabilities and ownership equity. The main categories of assets are usually listed first and are followed by the liabilities. The difference between the assets and the liabilities is known as equity or the net assets or the net worth or capital of the company. It's called a balance sheet because the two sides balance out. A typical format of the balance sheet has been given in Table 2.1. It works on the following formula:

Assets = Liabilities + Shareholders' Equity

2.1.1 FORMAT OF BALANCE SHEET

Table 2.1: Balance Sheet of XYZ Company

LIABILITIES	
• Share capital	(1)
• Reserves and surplus	(2)
• Secured Loans	(3)
• Unsecured loans	(4)
Total Liabilities	= (1)+(2)+(3)+(4)
ASSETS	
Fixed Assets	(5)
• Gross Block	
• Less: Accelerated Depreciation	
• Net Block	
• Capital work in progress	
• Investments	
Current Assets	(6)
• Inventories	
• Sundry Debtors	
• Cash and Bank balances	
• Loans and Advances	

Current Liabilities	(7)
• Current liabilities	
• Provisions	
Net Current Assets	(6) – (7) = (8)
Total Assets	= (5) +(8)

2.1.2 CONTENTS OF BALANCE SHEET

(A) Assets

In business and accounting, assets are economic resources owned by business or company. Any property or object of value that one possesses, usually considered as applicable to the payment of one's debts is considered an asset. Simplistically stated, assets are things of value that can be readily converted into cash.

The balance sheet of a firm records the monetary value of the assets owned by the firm. It is money and other valuables belonging to an individual or business.

Types of Assets

Two major types:

- Tangible assets
- Intangible assets

Tangible Assets

Tangible assets are those have a physical substance, such as equipment and real estate.

Intangible Assets

Intangible assets lack physical substance and usually are very hard to evaluate. Assets which do not possess any material value.

They include patents, copyrights, franchises, goodwill, trademarks, trade names, etc.

Types of Tangible Assets

- Fixed assets.
- Current assets.

Fixed Assets

This group includes land, buildings, machinery, vehicles, furniture, tools, and certain wasting resources e.g., timberland and minerals.

It is also referred to as PPE (property, plant, and equipment), these are purchased for continued and long-term use in earning profit in a business.

Current Assets

Current assets are cash and other assets expected to be converted to cash, sold, or consumed either in a year or in the operating cycle. These assets are continually turned over in the course of a business during normal business activity. There are 5 major items included into current assets:

- **Cash and Cash Equivalents**

  It is the most liquid asset, which includes currency, deposit accounts, and negotiable instruments (e.g., money orders, cheque, bank drafts).

- **Short-term Investments**

  It includes securities bought and held for sale in the near future to generate income on short-term price differences (trading securities).

- **Receivables**

  It is usually reported as net of allowance for uncollectable accounts.

- **Inventory**

  The raw materials, work-in-process goods and completely finished goods that are considered to be the portion of a business's assets that are ready or will be ready for sale.

- **Prepaid Expenses**

  These are expenses paid in cash and recorded as assets before they are used or consumed (a common example is insurance). The phrase net current assets (also called working capital) is often used and refers to the total of current assets less the total of current liabilities.

I. Gross Block

Gross block is the sum total of all assets of the company valued at their cost of acquisition. This is inclusive of the depreciation that is to be charged on each asset. Net block is the gross block less accumulated depreciation on assets. Net block is actually what the asset are worth to the company.

II. Capital Work in Progress

Work that has not been completed but has already incurred a capital investment from the company. This is usually recorded as an asset on the balance sheet. Work in progress indicates any good that is not considered to be a final product, but must still be accounted for because funds have been invested toward its production.

III. Investments

- Shares And Securities , such as bonds, common stock, or long-term notes
- Associate Companies
- Fixed deposits with banks/finance companies
- Investments in special funds (e.g., sinking funds or pension funds).
- Investments in fixed assets not used in operations (e.g., land held for sale).

Remark: While fixed deposits with banks are considered as fixed assets, the investments in associate concerns are treated as non current assets.

IV. Loans and Advances include

- House building advance
- Car, scooter, computer etc. advance
- Multi purpose advance
- Transfer travelling allowance advance
- Tour travelling allowance advance
- DRS payment.

V. Reserves

- Subsidy Received From The Govt.
- Development Rebate reserve
- Issue of Shares at Premium
- General Reserves

(B) Liability

A liability is a debt assumed by a business entity as a result of its borrowing activities or other fiscal obligations (such as funding pension plans for its employees). Liabilities are debts and obligations of the business they represent creditors claim on business assets.

Types of Liabilities

Current Liabilities

Current liabilities are short-term financial obligations that are paid off within one year or one current operating cycle. These liabilities are reasonably expected to be liquidated within a year. It includes:

- Accrued expenses as wages, taxes, and interest payments not yet paid
- Accounts payable
- Short-term notes
- Cash dividends and
- Revenues collected in advance of actual delivery of goods or services.

Long-Term Liabilities

Liabilities that are not paid off within a year, or within a business's operating cycle, are known as long-term or non-current liabilities. Such liabilities often involve large sums of money necessary to undertake opening of a business, major expansion of a business, replace assets, or make a purchase of significant assets. These liabilities are reasonably expected not to be liquidated within a year. It includes :

- Notes payable- debt issued to a single investor.
- Bonds payable – debt issued to general public or group of investors.
- Mortgages payable.
- Capital lease obligations – contract to pay rent for the use of plant, property or equipments.
- deferred income taxes payable, and
- pensions and other post-retirement benefits.

Contingent Liabilities

A third kind of liability accrued by companies is known as a contingent liability. The term refers to instances in which a company reports that there is a possible liability for an event, transaction, or incident that has already taken place; the company, however, does not yet know whether a financial drain on its resources will result. It also is often uncertain of the size of the financial obligation or the exact time that the obligation might have to be paid.

Fixed Liability

The liability which is to be paid of at the time of dissolution of firm is called fixed liability. Examples are Capital, Reserve and Surplus.

Secured Loans

A secured loan is a loan in which the borrower pledges some asset (e.g. a car or property) as collateral for the loan, which then becomes a secured debt owed to the creditor who gives the loan.

Unsecured Loans

An unsecured loan is a loan that is not backed by collateral. Also known as signature loan or personal loan. Unsecured loans are based solely upon the borrower's credit rating. An unsecured loan is considered much cheaper and carries less risk to the borrower. However, when an unsecured loan is granted, it does not necessarily have to be based on a credit score.

2.2 PROFIT & LOSS STATEMENT

Income statement, also called profit and loss statement (P&L) and Statement of Operations is financial statement that summarizes the revenues, costs and expenses incurred during a specific period of time - usually a fiscal quarter or year. These records provide information that shows the ability of a company to generate profit by increasing revenue and reducing costs. The purpose of the income statement is to show managers and investors whether the company made or lost money during the period being reported. The important thing to remember about an income statement is that it represents a period of time. This contrasts with the balance sheet, which represents a single moment in time. A typical format of the Profit & Loss Statement has been given in Table 2.2.

2.2.1 FORMAT OF PROFIT & LOSS STATEMENT

Table 2.2: Profit & Loss Statement of XYZ Company

Turnover	
Cost of sales	
Gross Profit	
Distribution cost	
Administration Expenses	
Other income	
Operating Profit	
Income from other investments	
Profit before interest	
Net interest	
Profit before Tax	
Tax Payable	

Profit after tax	
Dividend	
Retained profit	

2.2.2 CONTENTS OF PROFIT & LOSS STATEMENT

(a) Revenue - Cash inflows or other enhancements of assets of an entity during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major operations.

(b) Expenses - Cash outflows or other using-up of assets or incurrence of liabilities during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major operations.

(c) Turnover

The main source of income for a company is its turnover, primarily comprised of sales of its products and services to third-party customers.

(d) Sales

Sales are normally accounted for when goods or services are delivered and invoiced, and accepted by the customer, even if payment is not received until some time later, even in a subsequent trading period.

(e) Cost of Sales (COS)

The sum of direct costs of goods sold plus any manufacturing expenses relating to the sales (or turnover) is termed cost of sales, or production cost of sales, or cost of goods sold. These costs include:

- costs of raw materials stocks
- costs of inward-bound freight paid by the company

- Packaging costs
- direct production salaries and wages
- production expenses, including depreciation of trading-related fixed assets.

(f) Other Operating Expenses

These are not directly related to the production process, but contributing to the activity of the company, there are further costs that are termed ‘other operating expenses’.

These comprises of costs like:

- Distribution costs and selling costs,
- Administration costs, and
- Research and development costs (unless they relate to specific projects and the costs may be deferred to future periods).

(g) Other Operating Income

Other operating income includes all other revenues that have not been included in other parts of the profit and loss account. It does not include sales of goods or services, reported turnover, or any sort of interest receivable, reported within the net interest category.

(h) Gross Margin (or Gross Profit)

The difference between turnover, or sales, and COS is gross profit or gross margin. It needs to be positive and large enough to at least cover all other expenses.

(i) Operating Profit (OP)

The operating profit is the net of all operating revenues and costs, regardless of the financial structure of the company and whatever exceptional events occurred during the period that resulted in exceptional costs. The profit earned from a firm's normal core business operations. Also known as Earnings before Interest and Tax (EBIT).

OP = Turnover - COS - other Operating Expenses + Other Operating Income

(j) Profit before Tax (PBT)

A profitability measure that looks at a company's profits before the company has to pay corporate income tax. This measure deducts all expenses from revenue including interest expenses and operating expenses, but it leaves out the payment of tax.

(k) Profit after Tax (PAT)

PAT, or net profit, is the profit on ordinary activities after tax. The final charge that a company has to suffer, provided it has made sufficient profits, is therefore corporate taxation.

PAT = PBT - Corporation Tax

(l) Retained Profit

The retained profit for the year is what is left on the profit and loss account after deducting dividends for the year. The balance on the profit and loss account forms part of the capital (or equity, or shareholders' funds) of the company

2.3 FINANCIAL RATIOS

2.3.1 OBJECTIVES

The importance of ratio analysis lies in the fact that it presents data on a comparative basis and enables the drawing of inferences regarding the performance of the firm. Ratio analysis helps in concluding the following aspects:

Liquidity Position:

Ratio analysis helps in determining the liquidity position of the firm. A firm can be said to have the ability to meet its current obligations when they become due. It is measured with the help of liquidity ratios.

Long- Term Solvency:

Ratio analysis helps in assessing the long term financial viability of a firm. Long- term solvency measured by leverage/capital structure and profitability ratios.

Operating Efficiency:

Ratio analysis determines the degree of efficiency of management and utilization of assets. It is measured by the activity ratios.

Over-All Profitability:

The management of the firm is concerned about the overall profitability of the firm which ensures a reasonable return to its owners and optimum utilization of its assets. This is possible if an integrated view is taken and all the ratios are considered together.

Inter- firm Comparison:

Ratio analysis helps in comparing the various aspects of one firm with the other.

2.3.2 FINANCIAL RATIOS AND THEIR INTERPRETATION

Table 2.3: Different Financial Ratios

Sl.No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
1.	**Liquidity ratios**	**Net Working Capital** = Current assets-current liabilities	• It measures the liquidity of a firm.
		Current ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	• It measures the short term liquidity of a firm. A firm with a higher ratio has better liquidity. • A ratio of 2:1 is considered safe.
		Acid test or Quick ratio = $\frac{\text{Quick assets}}{\text{Current Liabilities}}$	• It measures the liquidity position of a firm . • A ratio of 1:1 is considered safe.
2.	**Turnover ratios**	**Inventory Turnover ratio** = $\frac{\text{Costs of good sold}}{\text{Average inventory}}$	• This ratio indicates how fast inventory is sold. • A firm with a higher ratio has better liquidity.
		Debtor Turnover ratio = $\frac{\text{Net credit sales}}{\text{Average debtors}}$	• This ratio measures how fast debts are collected. • A high ratio indicates shorter time lag between credit sales and cash collection.
		Creditor's Turnover ratio = $\frac{\text{Net credit purchases}}{\text{Average Creditors}}$	• A high ratio shows that accounts are to be settled rapidly.

Sl. No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
3.	**Capital Structure Ratios**	**Debt-Equity ratio** = $\frac{\text{Long term debt}}{\text{shareholder's Equity}}$	• This ratio indicates the relative proportions of debt and equity in financing the assets of a firm. • A ratio of 1:1 is considered safe.
		Debt to Total capital ratio = $\frac{\text{Long term debt}}{\text{Permanent Capital}}$	• It indicates what proportion of the permanent capital of a firm consists of long-term debt. • A ratio 1:2 is considered safe.
		Or $\frac{\text{Total debt}}{\text{Permanent capital} + \text{Current liabilities}}$	• It measures the share of the total assets financed by outside funds. • A low ratio is desirable for creditors.
		Or $\frac{\text{Total Shareholder's Equity}}{\text{Total Assets}}$	• It shows what portion of the total assets is financed by the owners' capital. • A firm should neither have a high ratio nor a low ratio.

Sl.No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
4.	**Coverage ratios**	**Interest Coverage** = $\frac{\text{Earning before Interests and Tax}}{\text{interest}}$	• A ratio used to determine how easily a company can pay on outstanding debt. • A ratio of more than 1.5 is satisfactory.
		Dividend Coverage = $\frac{\text{Earning after tax}}{\text{Preference Dividend}}$	• It measures the ability of firm to pay dividend on preference shares. • A high ratio is better for creditors.
		Total Coverage ratio = $\frac{\text{Earning before interests and tax}}{\text{Total fixed charges}}$	• It shows the overall ability of the firm to fulfill the liabilities. • A high ratio indicates better ability.

Sl. No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
5.	**Profitability ratios**	**Gross Profit margin** = $\frac{\text{Gross profit} * 100}{\text{Sales}}$	• It measures the profit in relation to sales. • A firm should neither have a high ratio nor a low ratio.
		Net Profit margin = $\frac{\text{Net Profit after tax before interest}}{\text{Sales}}$ Or $\frac{\text{Net Profit after Tax and Interest}}{\text{Sales}}$ Or $\frac{\text{Net profit after Tax and Interest}}{\text{Sales}}$	• It measures the net profit of a firm with respect to sale. • A firm should neither have a high ratio nor a low ratio.
6.	**Expenses ratios**	**Operating ratio** = $\frac{\text{Cost of Goods sold} + \text{other expenses}}{\text{Sales}}$	• Operating ratio shows the operational efficiency of the business. • Lower operating ratio shows higher operating profit and vice versa .
		Cost of Goods sold ratio = $\frac{\text{Cost of Goods sold}}{\text{Sales}}$	• It measures the cost of goods sold per sale.
		Specific Expenses ratio = $\frac{\text{Specific Expenses}}{\text{Sales}}$	• It measures the specific expenses per sale.

Sl.No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
7.	**Return on Investments**	**Return on Assets (ROA)** = $\frac{\text{Net Profit after Taxes} * 100}{\text{Total Assets}}$ Or $\frac{(\text{Net Profit after Taxes} + \text{Interest}) * 100}{\text{Total Assets}}$ Or $\frac{(\text{Net profit after Taxes} + \text{Interest}) * 100}{\text{Tangible Assets}}$ Or $\frac{(\text{Net Profit after Taxes} + \text{Interest}) * 100}{\text{Total Assets}}$ Or $\frac{(\text{ Net Profit after Taxes} + \text{Interest}) * 100}{\text{Fixed Assets}}$	• It measures the profitability of the total funds per investment of a firm.
		Return on Capital Employed (ROCE) = $\frac{(\text{Net Profit after Taxes}) * 100}{\text{total capital employed}}$ Or $\frac{(\text{Net Profit after Taxes} + \text{Interest}) * 100}{\text{Total Capital Employed}}$ Or $\frac{(\text{Net Profit after Taxes} + \text{Interest}) * 100}{\text{Total Capital Employed} - \text{Intangible assets}}$	• It measures profitability of the firm with respect to the total capital employed. • The higher the ratio, the more efficient use of capital employed.

Sl.No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
8.	**Shareholder's ratios**	**Return on Total Shareholders' Equity** = $\frac{\text{Net Profit after Taxes} * 100}{\text{Total shareholders equity}}$	• It reveals how profitably the owner's fund has been utilized by the firm.
		Return on Ordinary shareholders equity = $\frac{\text{Net profit after taxes and Pref. dividend} * 100}{\text{Ordinary Shareholders Equity}}$	• It determines whether the firm has earned satisfactory return for its equity holders or not.
		Earnings per Share (EPS) = $\frac{\text{Net Profit of Equityholders}}{\text{Number of Ordinary Shares}}$	• It measures the profit available to the equity holders on a per share basis.
		Dividend per Share (DPS) = $\frac{\text{Net profits after interest and preference dividend paid to ordinary shareholders}}{\text{Number of ordinary shares outstanding}}$	• It is the net distributed profit belonging to the shareholders divided by the number of ordinary shares.
		Dividend Payout ratio (D/P) = $\frac{\text{Total Dividend To Equityholders}}{\text{Total net profit of equityholders}}$ Or $\frac{\text{Dividend per Ordinary Share}}{\text{Earnings per Share}}$	• It shows what percentage share of the net profit after taxes and preference dividend is paid to the equity holders. A high D/P ratio is preferred from investor's point of view.

		Earnings per Yield = $\frac{\text{Earnings per Share}}{\text{Market Value per Share}}$	• It shows the percentage of each rupee invested in the stock that was earned by the company.
		Dividend Yield = $\frac{\text{Dividend per share}}{\text{Market Value per share}}$	• It shows how much a company pays out in dividends each year relative to its share price.
		Price- Earnings ratio (P/E) = $\frac{\text{Market value per Share}}{\text{Earnings per Share}}$	• It reflects the price currently paid by the market for each rupee of EPS. • Higher the ratio better it is for owners.
		Earning Power = $\frac{\text{Net profit after Taxes}}{\text{Total Assets}}$	• It measures the overall profitability and operational efficiency of a firm.
9.	**Activity Ratios**	**Inventory turnover** = $\frac{\text{Sales}}{\text{Closing Inventory}}$	• It measures how quickly inventory is sold. • A firm should neither have a high ratio nor a low ratio.
		Raw Material turnover = $\frac{\text{Cost of Raw Material used}}{\text{Average Raw Material Inventory}}$	
		Work in Progress turnover = $\frac{\text{Cost of Goods manufactured}}{\text{Average Work in process inventory}}$	
		Debtors turnover = $\frac{\text{Cost of Goods manufactured}}{\text{Average Work in Process Inventory}}$	• It shows how quickly current assets i.e receivables or debtors are converted to cash. • A firm should neither have a high ratio nor a low ratio.

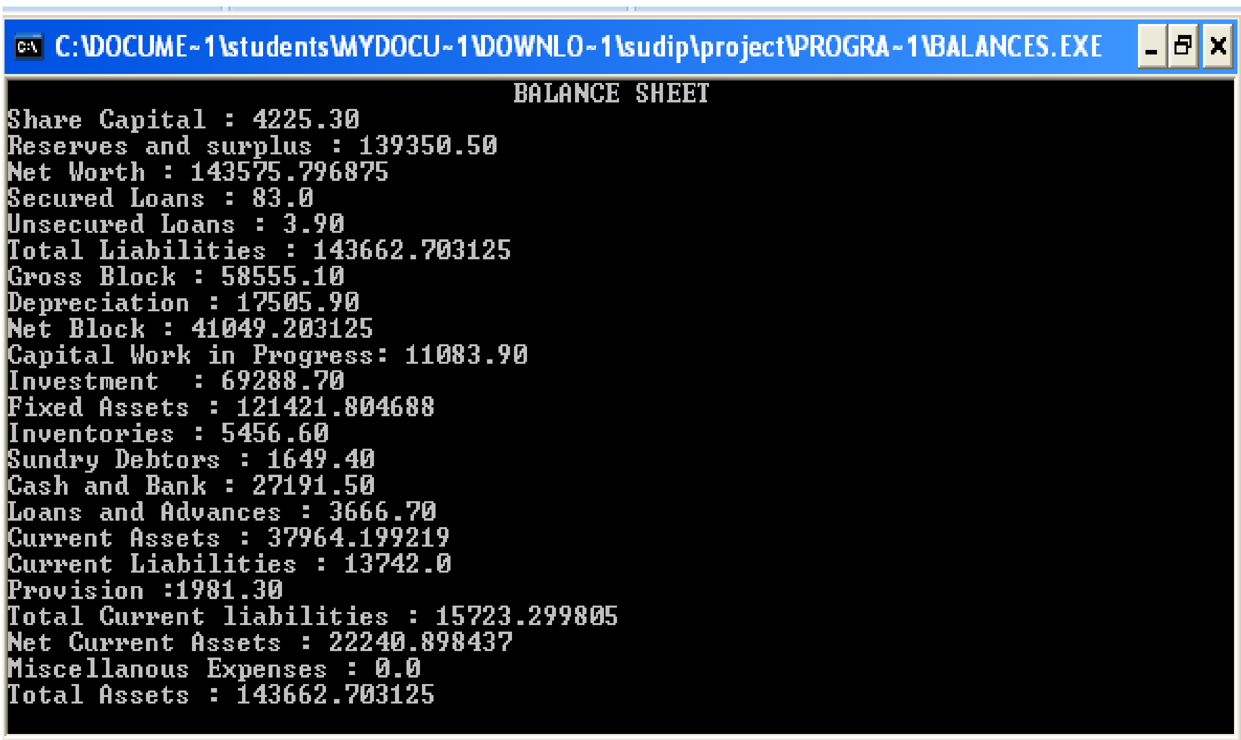
Sl. No.	CATEGORY	TYPES OF RATIO	INTERPRETATION
10.	**Assets Turnover Ratios**	**Total Assets turnover** = $\frac{\text{Cost of Goods Sold}}{\text{Total Assets}}$	• It measures the efficiency of a firm in managing and utilizing its assets.
		Fixed Assets turnover = $\frac{\text{Cost of Goods Sold}}{\text{Fixed Assets}}$	• Higher the ratio, more efficient is the firm in utilizing its assets.
		Capital turnover = $\frac{\text{Cost of Goods Sold}}{\text{Capital Employed}}$	
		Current Assets turnover = $\frac{\text{Cost of Goods Sold}}{\text{Current Assets}}$	

CHAPTER -03

DEVELOPMENT OF PROGRAMME IN C++ FOR PREPARATION OF FINANCIAL STATEMENTS & RATIOS

The program for preparation of financial statements & calculation of financial ratios have been developed in turbo C++ and the output has been given below:

3.1 Output for Preparation of Balance Sheet

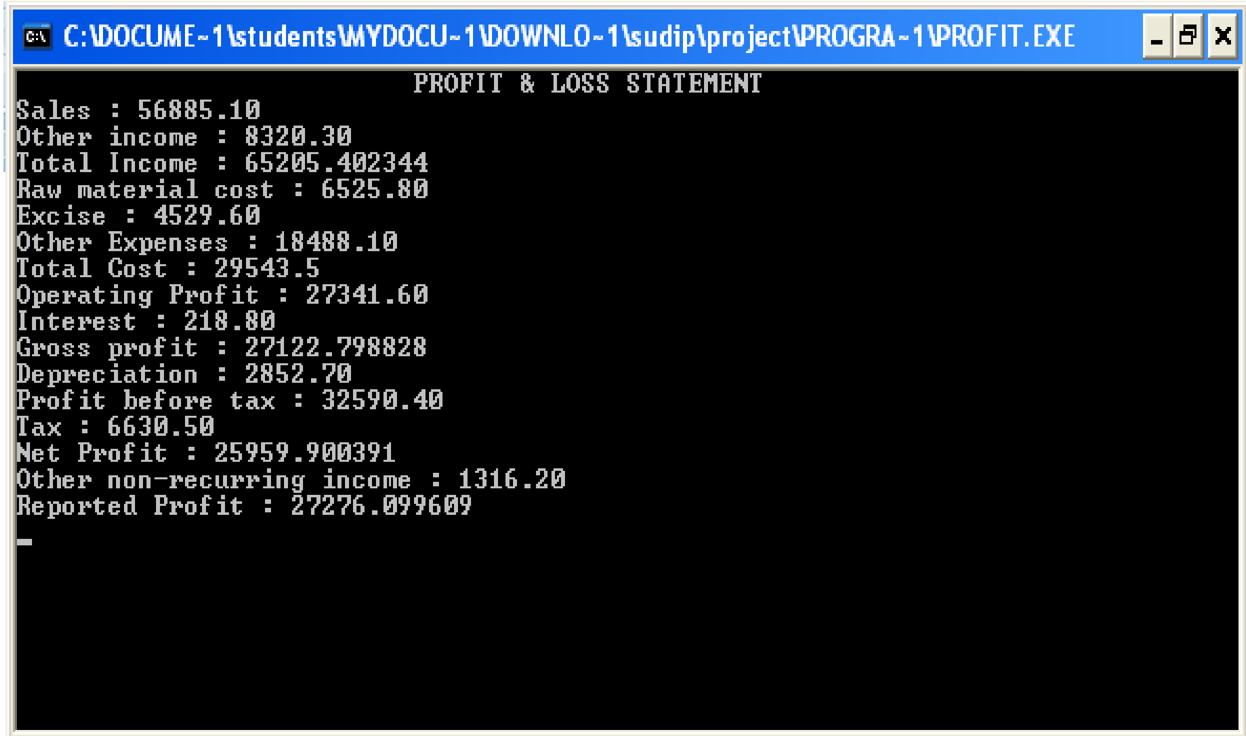


```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\BALANCES.EXE
                                 BALANCE SHEET
Share Capital : 4225.30
Reserves and surplus : 139350.50
Net Worth : 143575.796875
Secured Loans : 83.0
Unsecured Loans : 3.90
Total Liabilities : 143662.703125
Gross Block : 58555.10
Depreciation : 17505.90
Net Block : 41049.203125
Capital Work in Progress: 11083.90
Investment  : 69288.70
Fixed Assets : 121421.804688
Inventories : 5456.60
Sundry Debtors : 1649.40
Cash and Bank : 27191.50
Loans and Advances : 3666.70
Current Assets : 37964.199219
Current Liabilities : 13742.0
Provision :1981.30
Total Current liabilities : 15723.299805
Net Current Assets : 22240.898437
Miscellanous Expenses : 0.0
Total Assets : 143662.703125
```

(This data has been taken from Table 4.20: Balance Sheet, Section 4.1.4 Hindustan Zinc Ltd.)

Fig. 3.1: Preparation of Balance Sheet

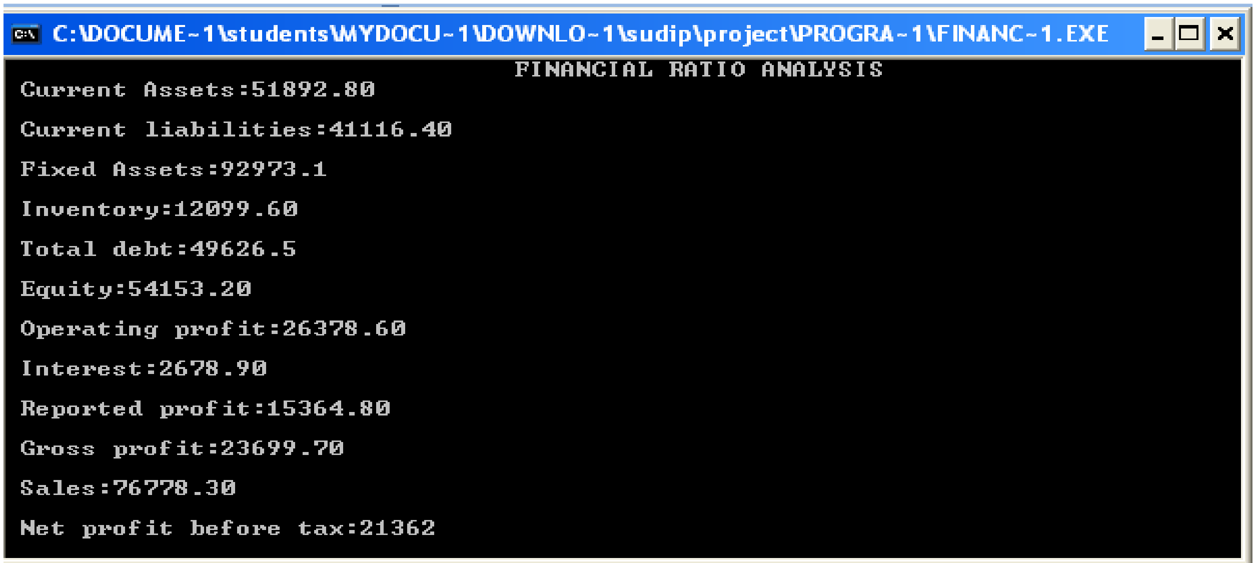
3.2 Output for Preparation of Profit & Loss Statement

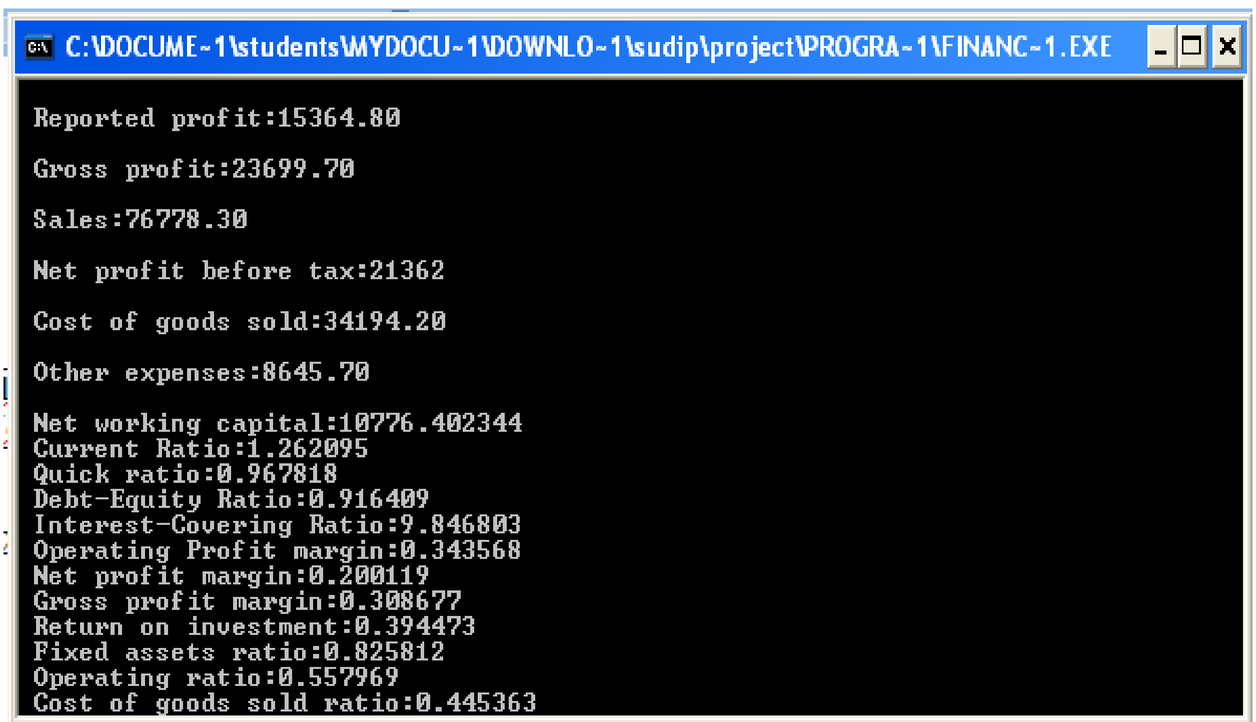


(This data has been taken from Table 4.21: Profit & Loss Statement, Section 4.1.4: HZL.)

Fig. 3.2: Calculation of P & L Statement

3.3 Output for Calculation of Financial Ratios





(This data has been taken from Table 4.8 and 4.9, Section 4.1.2: Jindal Steel & Power.)

Fig. 3.3: Calculation of Financial Ratios

CHAPTER- 04

FINANCIAL RATIO ANALYSIS

The ratio analysis of five companies from 2007-09 has been carried out below.

4.1 RATIO ANALYSIS

4.1.1 ACC Ltd.

Table 4.1: Balance Sheet of ACC Ltd. as at 31st Dec-2009

Liabilities	**Dec- 2009 (Rs in millions)**	**Dec- 2008 (Rs in millions)**	**Dec- 2007 (Rs in millions)**
Share Capital	1880.20	1,878.80	1,879.30
Reserves & Surplus	58282	47,398.50	39,647.80
» Net Worth (1)	60162.20	49,277.30	41,527.10
» Secured Loans (2)	5500	4,500.00	2,660.30
» Unsecured Loans (3)	169.20	320.30	403.80
Total Liabilities	65831.40	54,097.60	44,591.20
Assets	**Dec- 2009**	**Dec- 2008**	**Dec- 2007**
Gross Block	68262.70	58,356.70	54,640.70
(-) Acc. Depreciation	26679.80	23,659.70	21,493.50
» Net Block (A)	41582.90	34,697.00	33,147.20
Capital Work in Prgs.	21562.10	16,028.60	6,491.90
» Investments (C)	14756.40	6,790.80	8,448.10
Inventories	7,789.80	7,932.70	7,308.60
Sundry Debtors	2,037.00	3,101.70	2,892.90
Cash And Bank	7,463.80	9,842.40	7,434.80
Loans And Advances	7,145.50	7,797.60	5,443.10
(i)	24,436.10	28,674.40	23,079.40
Current Liabilities	25,587.30	22,453.90	19,912.70
Provisions	10,918.80	9,639.30	6,662.70
(ii)	36,506.10	32,093.20	26,575.40
» Net Curr. Assets	-12,070.00	-3,418.80	-3,496.00
» Misc. Expenses (E)	0.0	0.00	0.00
Total Assets	65,831.40	54,097.60	44,591.20

(Source: http://economictimes.indiatimes.com/bsheet.cms)

Table 4.2: Profit & Loss Statement

	Dec - 2009 (Rs in millions)	Dec - 2008 (Rs in millions)	Dec - 2007 (Rs in millions)
Sales	80,215.90	72,299.70	68,947.90
Other Income	1,361.70	2,115.90	1,422.40
Total Income	81,577.60	74,415.60	70,370.30
Raw Material Cost	12,046.80	11,801.50	18,367.20
Excise	7,815.80	10,702.10	9,703.20
Other Expenses	34,722.20	31,963.30	21,463.20
Operating Profit	25,631.10	17,832.80	19,414.30
Interest Name	843.00	399.60	738.70
Gross Profit	24,788.10	17,433.20	18,675.60
Depreciation	3,420.90	2,941.80	3,054.30
Profit Bef. Tax	22,728.90	16,607.30	17,028.20
Tax	6,889.30	5,246.00	4,917.00
Net Profit	15,839.60	11,361.30	12,111.20
Other Non-Recurring Income	227.70	766.40	2,269.50
Reported Profit	16,067.30	12,127.70	14,380.70
Equity Dividend	4,317.60	3,753.30	3,750.20

(Source: http://economictimes.indiatimes.com/profitloss.cms)

4.1.1.1 Ratio analysis for 2009

Table 4.3: Analysis of Financial Ratios for 2009

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 24,436.10 Current Liabilities = 36,506.10	-12070	Liquidity position is not good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 24,436.10 Current Liabilities = 36,506.10	0.66	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 16646.3 Current Liabilities = 36,506.10	0.45	It is not good.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 5669.2 Shareholder Equity = 60162.20	0.09	It is not safe.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 25,631.10 Interest = 843.00	30.40	It is satisfactory.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 25,631.10 Sales = 80,215.90	31.9%	It is not satisfactory.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 24,788.10 Sales = 80,215.90	30.9 %	It is not satisfactory.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 16,067.30 Sales = 80,215.90	20.03%	It is not satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 25,631.10 Average Assets = 94264.15	27.19 %	It is not good.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 22,728.90 Net Worth = 60162.20	37.7 %	It is not good.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 15,839.60 Average Net Worth = 54719.75	28.94%	It is not safe.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 25,631.10 Avg. Capital Employed = 128563.8	19.9%	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 12,046.80 Sales = 80,215.90	0.15	It is satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 34,722.20	0.58	It is not satisfactory.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 77901.4 Sales = 80,215.90	1.02	It is not safe.

4.1.1.2 Ratio analysis for 2008

Table 4.4: Analysis of Financial Ratios for 2008

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets =28674.40 Current Liabilities =32093.20	-3418.8	Liquidity available is less.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets =28674.40 Current Liabilities =32093.20	0.89	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 20741.70 Current Liabilities = 32093.20	0.64	It is not satisfactory.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 4820.30 Shareholder Equity = 49277.30	0.10	It is not good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 17832.80 Interest = 399.60	44.63	It is safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 17832.80 Sales = 72299.70	24.66%	It is not safe.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 17433.20 Sales = 72299.70	24%	It is not good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 12127.70 Sales =72299.70	16.77%	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit } * 100}{\text{Average Assets}}$	Operating Profit = 17832.80 Average Assets = 78768.7	22.63%	It is not satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax } * 100}{\text{Networth}}$	Profit Before Tax =16607.30 Net Worth = 49277.30	33.70%	It is safe.
11.	**Return on Net Worth** = $\frac{\text{Net Profit } * 100}{\text{Average Net worth}}$	Net profit = 11361.30 Average Net Worth =45402.2	25.02%	It is not satisfactory.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit =17832.80 Avg. Capital Employed = 118013	15.11%	It is not satisfactory.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 11801.50 Sales =72299.70	0.16	It is satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses= 31963.3	0.60	It is not good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 57516.4 Sales = 72299.70	1.25	It is not safe.

4.1.1.3 Ratio Analysis for 2007

Table 4.5: Analysis of Financial Ratios for 2007

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 23079.40 Current Liabilities = 26575.40	-3496	Liquidity available is less.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 23079.40 Current Liabilities =26575.40	0.86	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 15770.8 Current Liabilities = 26575.40	0.59	It is not satisfactory.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 3064.1 Shareholder Equity = 41,527.10	0.07	It is not good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 19414.30 Interest = 738.70	26.28	It is safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 19414.30 Sales = 68947.90	28%	It is not safe.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 18675.60 Sales = 68947.90	27%	It is not good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 14380.70 Sales =68947.90	20.8%	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 19414.30 Average Assets = 65840.65	29.48%	It is not satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 17028.20 Net Worth = 41,527.10	41.0%	It is satisfactory.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 12111.20 Average Net Worth = 36478.15	33.20%	It is safe.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 19414.30 Avg. Capital Employed = 89820	21.61%	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 18,367.20 Sales = 68947.90	0.26	It is satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 21463.20	0.57	It is not satisfactory.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 48087.2 Sales = 68947.90	1.43	It is not satisfactory.

4.1.1.4 Summary for Balance Sheet and Profit & Loss Statement

Table 4.6: Summary of Balance Sheet

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Current Assets	23,079.40	28,674.40	24,436.10	Short term liquidity has increased marginally.
Fixed Assets	3064.1	57516.4	77901.4	Substantial increase in fixed assets due to increase in gross block.
Current Liabilities	26,575.40	32,093.20	36506.10	Current liabilities have increased. NWC is affected.
Long term Liabilities	48087.2	4820.3	5669.2	Debts have been paid off.

Table 4.7: Summary of Profit & Loss statement

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Sales	68,947.90	72,299.70	80,215.90	Sales position has increased.
Raw Material Cost	18,367.20	11,801.50	12,046.80	Expenses have decreased.
Operating Profit	19,414.30	17,832.80	25,631.10	Operating profit has increased.
Profit Bef. Tax (PBT)	17,028.20	16,607.30	22,728.90	PBT has increased.
Net profit	12,111.20	11,361.30	15,839.60	Net profit has increased by 30.7 %.

4.1.2 Jindal Steel & Power Ltd.

Table 4.8: Balance Sheet of Jindal Steel & Power Ltd. as at 31st Mar-2009

Liabilities	March- 2009 (Rs in millions)	March- 2008 (Rs in millions)	March- 2007 (Rs in millions)
Share Capital	154.70	154.00	154.00
Reserves & Surplus	53,998.50	37,409.80	24,813.30
» **Net Worth (1)**	54,153.20	37,563.80	24,967.30
» Secured Loans (2)	21,054.90	17,833.90	21,156.10
» Unsecured Loans (3)	28,571.60	20,799.60	13,921.10
Total Liabilities(1+2+3	103,779.70	76,197.30	60,044.50
Assets	**March- 2009**	**March- 2008**	**March- 2007**
Gross Block	73,629.00	59,189.40	49,290.30
(-) Acc. Depreciation	16,170.00	11,831.10	7,817.50
» Net Block (A)	57,459.00	47,358.30	41,472.80
» **Capital Work in Prgs. (B)**	23,180.10	6,604.80	9,378.40
» **Investments (C)**	12,334.00	10,361.90	7,098.20
Inventories	12,099.60	9,805.60	6,424.40
Sundry Debtors	3,914.60	2,873.80	3,203.10
Cash And Bank	3,089.60	5,779.10	529.70
Loans And Advances	32,789.00	14,537.20	7,859.40
(i)	51,892.80	32,995.70	18,016.60
Current Liabilities	31,258.30	15,335.40	12,099.10
Provisions	9,858.10	5,819.40	3,854.80
(ii)	41,116.40	21,154.80	15,953.90
» **Net Curr. Assets (i - ii) (D)**	10,776.40	11,840.90	2,062.70
» **Misc. Expenses (E)**	30.20	31.40	32.40
Total Assets (A+B+C+D+E) »	103,779.70	76,197.30	60,044.50

(Source : http://economictimes.indiatimes.com/bsheet.cms)

Table 4.9: Profit & Loss Statement of Jindal Steel & Power Ltd.

	March - 2009 (Rs in millions)	March - 2008 (Rs in millions)	March - 2007 (Rs in millions)
Sales	76,778.30	53,681.40	35,230.80
Other Income	1,994.60	573.10	360.80
Total Income	78,772.90	54,254.50	35,591.60
Raw Material Cost	34,194.20	17,274.00	10,685.00
Excise	7,559.80	7,634.90	3,967.10
Other Expenses	8,645.70	5,813.40	6,480.60
Operating Profit	26,378.60	22,959.10	14,098.10
Interest Name	2,678.90	2,430.20	1,731.90
Gross Profit	23,699.70	20,528.90	12,366.20
Depreciation	4,330.30	4,515.10	3,364.70
Profit Bef. Tax	21,362.00	16,584.20	9,359.60
Tax	4,654.00	2,655.50	2,418.50
Net Profit	16,708.00	13,928.70	6,941.10
Other Non-Recurring Income	-1,343.20	-1,559.10	88.80
Reported Profit	15,364.80	12,369.60	7,029.90
Equity Dividend	853.30	620.20	554.30

(Source: http://economictimes.indiatimes.com/profitloss.cms)

4.1.2.1 Ratio Analysis for 2009

Table 4.10: Analysis of Financial Ratios for 2009

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 51892.80 Current Liabilities = 41116.40	10776.4	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 51892.80 Current Liabilities = 41116.40	1.26	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets =39793.2 Current Liabilities = 41116.40	0.96	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 49626.5 Shareholder Equity = 54153.20	0.91	It is good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 26378.60 Interest = 2678.90	9.84	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 26378.60 Sales = 76778.30	34%	It is safe.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 23699.70 Sales = 76778.30	30.86 %	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 15364.80 Sales = 76778.30	20.01 %	It is not desirable.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 26378.60 Average Assets = 132045.9	19.97%	It is not satisfactory
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 21362 Net Worth = 54153.20	39.44%	It is satisfactory
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net Worth}}$	Net profit = 16,708.00 Average Net Worth = 45858.5	36.4%	It is satisfactory

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit } * 100}{\text{Average Capital Employed}}$	Operating Profit = 26378.60 Avg. Capital Employed = 152228.9	17.32%	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 34,194.20 Sales =76778.30	0.45	It is not satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 8,645.70	0.55	It is not satisfactory.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 92973.1 Sales =76778.30	0.82	It is good.

4.1.2.2 Ratio Analysis for 2008

Table 4.11: Analysis of Financial Ratios for 2008

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 32,995.70 Current Liabilities = 21,154.80	11840.9	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 32,995.70 Current Liabilities = 21,154.80	1.5	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 23190.1 Current Liabilities = 21,154.80	1.0	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 38633.5 Shareholder Equity = 37,563.80	1.0	It is good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 22,959.10 Interest = 2,430.20	9.44	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 22,959.10 Sales = 53,681.40	42%	It is safe.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 20,528.90 Sales = 53,681.40	38.24%	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 12369.60 Sales = 53,681.40	23.04%	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 22,959.10 Average Assets = 86643.35	26.49%	It is not good.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax =16584.20 Net Worth = 37563.80	44.14%	It is satisfactory
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 13928.70 Average Net Worth = 31265.55	44.54%	It is satisfactory

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 22,959.10 Avg. Capital Employed = 105197.7	21.8%	It is not good
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 17,274.00 Sales = 53,681.40	0.32	It is not satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 5813.40	0.43	It is not satisfactory.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 64325 Sales = 53,681.40	0.83	It is good.

4.1.2.3 Ratio Analysis for 2007

Table 4.12: Analysis of Financial Ratios for 2007

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 18,016.60 Current Liabilities =15,953.90	2062.7	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 18,016.60 Current Liabilities =15,953.90	1.12	It is not satisfactory.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 11592.2 Current Liabilities =15,953.90	0.72	It is not satisfactory.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 35077.2 Shareholder Equity = 24,967.30	1.40	It is good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 14,098.10 Interest = 1,731.90	8.14	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 14,098.10 Sales = 35,230.80	40 %	It is satisfactory.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 12,366.20 Sales = 35,230.80	35%	It is satisfactory
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 7,029.90 Sales = 35,230.80	19.9%	It is not satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 14,098.10 Average Assets = 66821.95	21.09%	It is not satisfactory
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 9,359.60 Net Worth = 24,967.30	37.48%	It is safe.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 6,941.10 Average Net Worth = 21707.2	31.9%	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 14,098.10 Avg. Capital Employed = 80691.15	17.47%	It is not safe.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 10,685.00 Sales = 35,230.80	0.30	It is not satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 6,480.60	0.48	It is not satisfactory
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 57949.4 Sales = 35,230.80	0.61	It is not good.

4.1.2.4 Summary for Balance Sheet and Profit & Loss Statement

Table 4.13: Summary of Balance Sheet

	2007 (Rs in millions)	**2008 (Rs in millions)**	**2009 (Rs in millions)**	**Remarks**
Current Assets	18016.60	32995.7	51892.80	Current asset position has increased. Liquidity position is very good.
Fixed Assets	57949.4	64325	92973.1	Fixed Assets have increased due to increase in gross block.
Current Liabilities	3854.80	5819.40	9858.10	Current Liabilities have increased marginally.
Long term Liabilities	35077.2	38633.5	49626.5	Debts have increased due to more investment.

Table 4.14: Summary of Profit & Loss Statement

	2007 (Rs in millions)	**2008 (Rs in millions)**	**2009 (Rs in millions)**	**Remarks**
Sales	35,230.80	53,681.40	76,778.30	Sales position has doubled.
Raw Material Cost	10,685.00	17,274.00	34,194.20	Purchase of raw material has increased.
Operating Profit	14,098.10	22,959.10	26,378.60	Operating profit has increased.
Profit Bef. Tax (PBT)	9,359.60	16,584.20	21,362.00	PBT has increased.
Net profit	6,941.10	13,928.70	16,708.00	Net profit has increased 140.7%

4.1.3 Tata Steel

Table 4.15: Balance Sheet of Tata Steel as at 31st mar-2009

Liabilities	**March- 2009 (Rs in millions)**	**March- 2008 (Rs in millions)**	**March- 2007 (Rs in millions)**
Share Capital	62,034.50	62,033.00	7,277.30
Reserves & Surplus	235,011.50	210,974.30	133,684.20
Net Worth (1)	297,046.00	273,007.30	140,961.50
Secured Loans (2)	39,130.50	35,205.80	37,589.20
Unsecured Loans (3)	230,331.30	145,011.10	58,864.10
Total Liabilities(1+2+3)	566,507.80	453,224.20	237,414.80
Assets	**March- 2009**	**March- 2008**	**March- 2007**
Gross Block	200,570.10	164,795.90	160,294.90
(-) Acc. Depreciation	90,624.70	82,234.80	74,863.70
Net Block (A)	109,945.40	82,561.10	85,431.20
Capital Work in Prgs. (B)	34,876.80	43,674.50	24,974.40
Investments (C)	423,717.80	41,031.90	61,061.80
Inventories	34,804.70	26,049.80	23,329.80
Sundry Debtors	6,359.80	5,434.80	6,316.30
Cash And Bank	15,906.00	4,650.40	76,813.50
Loans And Advances	58,846.10	345,828.40	40,259.50
(i)	115,916.60	381,963.40	146,719.10
Current Liabilities	89,657.60	68,422.60	63,492.40
Provisions	29,341.90	29,135.20	19,304.60
(ii)	118,999.50	97,557.80	82,797.00
Net Curr. Assets (i - ii) (D)	-3,082.90	284,405.60	63,922.10
Misc. Expenses (E)	1,050.70	1,551.10	2,025.30
Total Assets (A+B+C+D+E)	566,507.80	453,224.20	237,414.80

(Source: http://economictimes.indiatimes.com/bsheet.cms)

Table 4.16: Profit & Loss Statement Tata Steel

	March - 2009 (Rs in millions)	March - 2008 (Rs in millions)	March - 2007 (Rs in millions)
Sales	243,483.20	196,544.10	174,526.60
Other Income	3,053.60	3,472.80	4,851.40
Total Income	246,536.80	200,016.90	179,378.00
Raw Material Cost	82,794.40	60,248.00	56,799.50
Excise	24,952.10	25,370.20	23,041.80
Other Expenses	43,972.30	28,480.50	25,547.80
Operating Profit	91,764.40	82,445.40	69,137.50
Interest Name	14,895.00	9,290.30	2,512.50
Gross Profit	76,869.40	73,155.10	66,625.00
Depreciation	9,734.00	8,346.10	8,192.90
Profit Bef. Tax	70,189.00	68,281.80	63,283.50
Tax	21,148.70	23,802.80	20,404.70
Net Profit	49,040.30	44,479.00	42,878.80
Other Non-Recurring Income	2,977.10	2,391.30	-657.30
Reported Profit	52,017.40	46,870.30	42,221.50
Equity Dividend	11,689.50	11,689.30	9,439.10

(Source: http://economictimes.indiatimes.com/profitloss.cms)

4.1.3.1 Ratio Analysis for 2009

Table 4.17: Analysis of Financial Ratios for 2009

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 115,916.60 Current Liabilities =118,999.50	- 3082.9	Liquidity available is less.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 115,916.60 Current Liabilities = 118,999.50	0.97	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 81111.9 Current Liabilities =118,999.50	0.68	It is not safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 269461.8 Shareholder Equity = 297,046.00	0.91	It is good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 91,764.40 Interest = 14,895.00	6.16	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 91,764.40 Sales = 243,483.20	37 %	It is good.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 76,869.40 Sales = 243,483.20	31.57 %	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 52,017.40 Sales =243,483.20	21.36%	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 91,764.40 Average Assets = 616843.75	14.87%	It is not good.
10.	**Return on Investments** = $\frac{\text{Profit Before Tax} * 100}{\text{Net worth}}$	Profit Before Tax = 70189 Net Worth = 297046	23.62%	It is not satisfactory
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 49040.30 Average Net Worth = 285026.65	17.20%	It is not good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 91,764.40 Avg. Capital Employed = 725122.4	12.65%	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 82,794.40 Sales = 243,483.20	0.34	It is not satisfactory
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 43,972.30	0.52	It is not satisfactory
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed Assets}}$	Fixed Assets = 568540 Sales = 243,483.20	0.42	It is satisfactory

4.1.3.2 Ratio Analysis for 2008

Table 4.18: Analysis of Financial Ratios for 2008

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 381963.40 Current Liabilities = 97557.80	284405.6	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 381963.40 Current Liabilities = 97557.80	3.92	It is safe
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 355913.6 Current Liabilities = 97557.80	3.64	It is satisfactory
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 180216.9 Shareholder Equity = 273007.30	0.66	It is not safe
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 82445.40 Interest = 9290.30	8.87	It is not satisfactory
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 82445.40 Sales = 196544.10	41%	It is satisfactory

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 73155.10 Sales = 196544.10	37.22%	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 46870.30 Sales =196544.10	23.8%	It is not satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 82445.40 Average Assets = 433708.7	19 %	It is not safe.
10.	**Return on Investments** = $\frac{\text{Profit before Tax} * 100}{\text{Net worth}}$	Profit Before Tax = 68281.80 Net Worth = 273007.30	25.01%	It is not good.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 44479 Average Net Worth = 206984.4	21.48%	It is not satisfactory

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 82445.40 Avg. Capital Employed = 523886.1	15.73%	It is not safe
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 60248 Sales = 196544.10	0.30	It is not satisfactory
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 28480.50	0.45	It is not satisfactory
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed Assets}}$	Fixed Assets = 167267.5 Sales = 196544.10	1.17	It is not safe

4.1.3.3 Ratio Analysis for 2007

Table 4.19: Analysis of Financial Ratios for 2007

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 146,719.10 Current Liabilities = 82,797.00	63922.1	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 146,719.10 Current Liabilities = 82,797.00	1.77	It is not satisfactory.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 123389.3 Current Liabilities = 82,797.00	1.49	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 96453.3 Shareholder Equity = 140,961.50	0.68	It is not safe.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 69,137.50 Interest = 2,512.50	27.51	It is not satisfactory.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 69,137.50 Sales = 174,526.60	39.6%	It is good.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 66,625.00 Sales = 174,526.60	38.17%	It is satisfactory.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 42,221.50 Sales = 174,526.60	24.19%	It is not satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit}}{\text{Average Assets}}$	Operating Profit = 69,137.50 Average Assets = 253753.3	27.24%	It is not good.
10.	**Return on Investments** = $\frac{\text{Profit Before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 63,283.50 Net Worth = 140,961.50	44.89%	It is safe.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 42,878.80 Average Net Worth = 119257.25	35.95%	It is good.

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 69,137.50 Avg. Capital Employed = 329720.95	20.96%	It is not satisfactory.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 56,799.50 Sales = 174,526.60	0.32	It is not good.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 25,547.80	0.47	It is not good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 171467.4 Sales = 174,526.60	1.01	It is not safe.

4.1.3.4 Summary for Balance Sheet and Profit & Loss Statement

Table 4.20: Summary of Balance Sheet

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Current Assets	146719.10	381963.40	115916.60	Short term liquidity available is very less.
Fixed Assets	171467.4	167267.5	568540	Fixed Assets have increased due to increase in investment.
Current Liabilities	82797	97557.80	118999.50	Substantial increase in liabilities. Liquidity position is not good.
Long term Liabilities	96453.3	180216.9	269461.8	Debts have increased because of more investment.

Table 4.21: Summary of Profit & Loss Statement

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Sales	174,526.6	196,544.10	243,483.20	Sales have increased by 39.5 %
Raw Material Cost	56,799.50	60,248.00	82,794.40	Expenses have increased.
Operating Profit	69,137.50	82,445.40	91,764.40	Operating profit has increased.
Profit Bef. Tax (PBT)	63,283.50	68,281.80	70,189.00	PBT has increased.
Net profit	42,878.80	44,479.00	49,040.30	Net profit has increased marginally.

4.1.4 HINDUSTAN ZINC LIMITED

Table 4.22: Balance Sheet of HZL as at 31st Mar-2009

Liabilities	March- 2009 (Rs in millions)	March- 2008 (Rs in millions)	March- 2007 (Rs in millions)
Share Capital	4,225.30	4,225.30	4,225.30
Reserves & Surplus	139,350.50	114,256.60	72,045.30
Net Worth (1)	143,575.80	118,481.90	76,270.60
Secured Loans (2)	83.00	0.00	0.00
Unsecured Loans (3)	3.90	3.90	3.90
Total Liabilities(1+2+3)	143,662.70	118,485.80	76,274.50
Assets	**March- 2009**	**March- 2008**	**March- 2007**
Gross Block	58,555.10	51,219.20	34,997.90
(-) Acc. Depreciation	17,505.90	14,846.40	12,641.90
Net Block (A)	41,049.20	36,372.80	22,356.00
Capital Work in Prgs. (B)	11,083.90	5,253.40	6,349.90
Investments (C)	69,288.70	63,324.50	44,033.00
Inventories	5,456.60	5,181.00	4,992.80
Sundry Debtors	1,649.40	4,436.60	5,566.20
Cash And Bank	27,191.50	13,627.80	1,197.00
Loans And Advances	3,666.70	3,903.30	3,107.10
(i)	37,964.20	27,148.70	14,863.10
Current Liabilities	13,742.00	12,377.80	9,478.00
Provisions	1,981.30	1,235.80	1,849.50
(ii)	15,723.30	13,613.60	11,327.50
Net Curr. Assets (i - ii) (D)	22,240.90	13,535.10	3,535.60
Misc. Expenses (E)	0.00	0.00	0.00
Total Assets (A+B+C+D+E)	143,662.70	118,485.80	76,274.50

(Source: http://economictimes.indiatimes.com/bsheet.cms)

Table 4.23 : Profit & Loss Statement of HZL

	March - 2009 (12 months)	March - 2008 (12 months)	March - 2007 (12 months)
Sales	56,885.10	78,954.70	85,474.20
Other Income	8,320.30	5,316.50	1,139.50
Total Income	65,205.40	84,271.20	86,613.70
Raw Material Cost	6,525.80	5,338.20	2,718.20
Excise	4,529.60	8,414.40	6,730.30
Other Expenses	18,488.10	11,222.30	11,779.10
Operating Profit	27,341.60	53,979.80	64,246.60
Interest Name	218.80	230.50	284.40
Gross Profit	27,122.80	53,749.30	63,962.20
Depreciation	2,852.70	2,205.10	1,560.80
Profit Bef. Tax	32,590.40	56,845.40	63,535.80
Tax	6,630.50	16,689.60	20,365.30
Net Profit	25,959.90	40,155.80	43,170.50
Other Non-Recurring Income	1,316.20	3,804.90	1,247.60
Reported Profit	27,276.10	43,960.70	44,418.10
Equity Dividend	1,690.10	2,112.60	2,112.60

(Source: http://economictimes.indiatimes.com/profitloss.cms)

4.1.4.1 Ratio Analysis for 2009

Table 4.24: Analysis of Financial Ratios for 2009

Sl. No.	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 37,964.20 Current Liabilities =15,723.30	21970.9	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets =37,964.20 Current Liabilities =15,723.30	2.39	It is satisfactory
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 32507.6 Current Liabilities =15,723.30	2.06	It is satisfactory
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 86.90 Shareholder Equity = 143,575.80	0.0006	It is not good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 27,341.60 Interest = 218.80	124.96	It is satisfactory
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 27,341.60 Sales = 56,885.10	48.06 %	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 27,122.80 Sales = 56,885.10	47.6 %	It is satisfactory.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 27,276.10 Sales =56,885.10	47.9 %	It is satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 27,341.60 Average Assets = 145607.7	18.77%	It is not good.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 32,590.40 Net Worth = 143,575.80	22.69 %	It is not satisfactory.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 25,959.90 Average Net Worth = 131028.85	17.52%	It is not safe.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 27,341.60 Avg. Capital Employed = 160411.15	17.04%	It is not satisfactory.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 6,525.80 Sales = 56,885.10	0.11	It is good.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 18,488.10	0.43	It is not good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 121421.8 Sales = 56,885.10	0.46	It is not safe.

4.1.4.2 Ratio Analysis for 2008

Table 4.25: Analysis of Financial Ratios for 2008

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 27,148.70 Current Liabilities = 13,613.60	13535.1	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 27,148.70 Current Liabilities = 13,613.60	1.99	It is satisfactory.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 21967.7 Current Liabilities = 13,613.60	1.61	It is good.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 3.90 Shareholder Equity = 118,481.90	0.000033	It is not safe.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 53,979.80 Interest = 230.50	234.18	It is satisfactory.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 53,979.80 Sales = 78,954.70	68.3%	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 53,749.30 Sales = 78,954.70	68.07 %	It is satisfactory.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 43,960.70 Sales = 78,954.70	55.6 %	It is satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 53,979.80 Average Assets = 109850.7	49.13 %	It is good.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 56,845.40 Net Worth = 118,481.90	47.9 %	It is good.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 40,155.80 Average Net Worth = 97376.25	41.23 %	It is safe.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 53,979.80 Avg. Capital Employed = 244642.5	22.06 %	It is not satisfactory.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 5,338.20 Sales = 78,954.70	0.067	It is not good.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 11,222.30	0.21	It is not good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 104950.7 Sales = 78,954.70	0.75	It is not safe

4.1.4.3 Ratio Analysis for 2007

Table 4.26: Analysis of Financial Ratios for 2007

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 14,863.10 Current Liabilities =11,327.50	3535.6	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets =14,863.10 Current Liabilities = 11,327.50	1.31	It is not safe
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 9870.3 Current Liabilities = 11,327.50	0.87	It is not satisfactory.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 3.90 Shareholder Equity = 76,270.60	0.00005	It is not safe
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 64,246.60 Interest = 284.40	225.90	It is good.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 64,246.60 Sales = 85,474.20	75.16%	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 63,962.20 Sales = 85,474.20	74.8%	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 44,418.10 Sales = 85,474.20	51.9%	It is good.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 64,246.60 Average Assets = 67765.5	94.80%	It is satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 63,535.80 Net Worth = 76,270.60	83.30%	It is satisfactory.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 43170.50 Average Net Worth = 55284.2	78.08%	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 64,246.60 Avg. Capital Employed = 77994.75	82.37%	It is satisfactory
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 2,718.20 Sales = 85,474.20	0.03	It is safe.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 11,779.10	0.17	It is safe.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 72738.9 Sales = 85,474.20	1.17	It is not satisfactory.

4.1.4.4 Summary for Balance Sheet and Profit & Loss Statement

Table 4.27: Summary of Balance Sheet

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Current Assets	14863.10	27148.70	37964.20	Current assets have increased. Liquidity available is satisfactory.
Fixed Assets	72738.9	104950.7	121421.8	Gross block of the company has increased.
Current Liabilities	11327.50	13613.60	15723.30	Liability position has increased marginally.
Long term Liabilities	3.90	3.90	86.90	Debts have increased significantly due to more investment.

Table 4.28: Summary of Profit & Loss Statement

	2007 (in millions)	2008 (in millions)	2009 (in millions)	Remarks
Sales	85,474.20	78,954.70	56,885.10	Sales have come down.
Raw Material Cost	2,718.20	5,338.20	6,525.80	Expenses have increased very little.
Operating Profit	64246.60	53,979.80	27,341.60	Operating profit has decreased.
Profit Bef. Tax (PBT)	63,535.80	56,845.40	32,590.40	Substantial decrease in Profit Bef. Tax.
Net profit	43,170.50	40,155.80	43,170.50	Net profit didn’t improve at all.

4.1.5 GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED

Table 4.29 Balance Sheet of GMDC as at 31st Dec-2009

Liabilities	**Dec- 2009 (Rs in millions)**	**Dec- 2008 (Rs in millions)**	**Dec- 2007 (Rs in millions)**
Share Capital	636.0	318.0	318.0
Reserves & Surplus	11551.06	10298.97	8069.33
Net Worth (1)	12187.06	10,616.97	8,387.33
Secured Loans (2)	0.00	2,000.00	9,598.29
Unsecured Loans (3)	4,785.71	4,642.86	0.00
Total Liabilities(1+2+3)	16,972.78	17,259.83	17,985.62
Assets	**Dec- 2009**	**Dec- 2008**	**Dec- 2007**
Gross Block	18,864.06	18465.34	17917.84
(-) Acc. Depreciation	5,782.02	5037.03	4204.29
Net Block (A)	5,782.02	5037.03	4204.29
Capital Work in Prgs. (B)	19.50	134.08	329.02
Investments (C)	585.59	607.38	613.90
Inventories	591.87	482.51	293.59
Sundry Debtors	926.24	807.70	933.52
Cash And Bank	946.26	1,280.66	745.49
Loans And Advances	12,625.63	11,021.89	9,980.44
(i)	15,089.99	13,592.76	11,953.04
Current Liabilities	4,374.17	4,438.04	4,042.82
Provisions	7,540.26	6,096.85	4,936.49
(ii)	11,914.43	10,534.90	8,979.30
Net Curr. Assets (i - ii) (D)	3,175.56	3,057.86	2,973.73
Misc. Expenses (E)	110.08	32.21	355.41
Total Assets (A+B+C+D+E)	16,972.78	17,259.83	17985.62

(Source: http://economictimes.indiatimes.com/bsheet.cms)

Table 4.30: Profit & Loss Statement

	Dec - 2009 (Rs in millions)	Dec - 2008 (Rs in millions)	Dec - 2007 (Rs in millions)
Sales	9,772.79	9801.22	5889.49
Other Income	452.01	556.07	338.74
Total Income	10,224.80	10357.29	6228.23
Raw Material Cost	917.77	315.58	296.92
Excise	39.33	9.34	0.78
Other Expenses	4,107.70	3882.86	2622.84
Operating Profit	4,707.99	5593.44	2968.95
Interest Name	583.54	718.67	744.96
Gross Profit	4,124.45	4874.77	2223.98
Depreciation	777.78	955.37	1293.20
Profit Bef. Tax	3,775.18	4152.78	1239.41
Tax	1,335.99	1444.64	590.74
Net Profit	2,439.19	2708.14	648.67
Other Non-Recurring Income	-125.02	-68.83	296.06
Reported Profit	2,314.18	2639.31	944.74
Equity Dividend	636.0	318.0	318.0

(Source: http://economictimes.indiatimes.com/profitloss.cms)

4.1.5.1 Ratio Analysis for 2009

Table 4.31: Analysis of Financial Ratios for 2009

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 15,089.99 Current Liabilities = 11,914.43	3175.56	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 15,089.99 Current Liabilities = 11,914.43	1.26	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 14498.12 Current Liabilities = 11,914.43	1.21	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 4,785.71 Shareholder Equity = 12,187.06	0.39	It is not good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 4,707.99 Interest = 583.54	8.07	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 4,707.99 Sales = 9,772.79	48%	It is safe.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 4,124.45 Sales = 9,772.79	42.2 %	It is satisfactory
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 2,314.18 Sales = 9,772.79	23.6 %	It is not satisfactory.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 4,707.99 Average Assets = 20424.17	23.05 %	It is not satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net worth}}$	Profit Before Tax = 3,775.18 Net Worth = 12,187.06	30.97 %	It is good.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 2,439.19 Average Net Worth = 11402.01	21.39 %	It is not good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 4,707.99 Avg. Capital Employed = 31648.84	14.87	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 917.77 Sales = 9,772.79	0.09	It is satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 4,107.70	0.51	It is good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 6387.11 Sales = 9,772.79	1.53	It is not good.

4.1.5.2 Ratio Analysis for 2008

Table 4.32: Analysis of Financial Ratios for 2008

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 13,592.76 Current Liabilities = 10,534.90	3057.86	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 13,592.76 Current Liabilities = 10,534.90	1.29	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 13110.25 Current Liabilities = 10,534.90	1.24	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 6,642.86 Shareholder Equity = 10,616.97	0.63	It is not good.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 5593.44 Interest = 718.67	7.78	It is not satisfactory.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 5593.44 Sales = 9801.22	57%	It is good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 4874.77 Sales = 9801.22	49.73%	It is satisfactory.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 2639.31 Sales = 9801.22	26.9 %	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit} * 100}{\text{Average Assets}}$	Operating Profit = 5593.44 Average Assets = 18235.75	30.67 %	It is satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net worth}}$	Profit Before Tax = 4152.78 Net Worth = 10,616.97	39.11 %	It is satisfactory.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 2708.14 Average Net Worth = 9502.15	28.50 %	It is not good.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 5593.44 Avg. Capital Employed = 27992.85	19.98%	It is not good.
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 315.58 Sales = 9801.22	0.032	It is not satisfactory.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 3882.86	0.43	It is not satisfactory.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 5778.49 Sales = 9801.22	1.69	It is not good.

4.1.5.3 Ratio Analysis for 2007

Table 4.33: Analysis of Financial Ratios for 2007

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
01.	**Net Working Capital** = Current assets-Current liabilities	Current Assets = 11,953.04 Current Liabilities = 8,979.30	2973.74	Liquidity position is good.
02.	**Current Ratio** = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Current Assets = 11,953.04 Current Liabilities = 8,979.30	1.33	It is not safe.
03.	**Acid test or Quick ratio** = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	Quick Assets = 11659.45 Current Liabilities = 8,979.30	1.29	It is safe.
04.	**Debt-Equity Ratio** = $\frac{\text{Long term debt}}{\text{Shareholder's Equity}}$	Total debt = 9,598.29 Shareholder Equity = 8,387.33	1.14	It is satisfactory.
05.	**Interest Coverage** = $\frac{\text{Operating Profit}}{\text{Interest}}$	Operating Profit = 2968.95 Interest = 744.96	3.98	It is not safe.
06.	**Operating Profit margin** = $\frac{\text{Operating Profit} * 100}{\text{Sales}}$	Operating Profit = 2968.95 Sales = 5889.49	50.41%	It is satisfactory.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
07.	**Gross Profit margin** = $\frac{\text{Gross Profit} * 100}{\text{Sales}}$	Gross Profit = 2223.98 Sales = 5889.49	37.7%	It is good.
08.	**Net Profit margin** = $\frac{\text{Net Profit} * 100}{\text{Sales}}$	Net Profit = 944.74 Sales = 5889.49	16.04%	It is not good.
09.	**Return on Assets** = $\frac{\text{Operating Profit}}{\text{Average Assets}}$	Operating Profit = 2968.95 Average Assets = 19482.04	15.23 %	It is not satisfactory.
10.	**Return on Investments** = $\frac{\text{Net Profit before Tax} * 100}{\text{Net Worth}}$	Profit Before Tax = 1239.20 Net Worth = 8,387.33	15.41%	It is not safe.
11.	**Return on Net Worth** = $\frac{\text{Net Profit} * 100}{\text{Average Net worth}}$	Net profit = 648.67 Average Net Worth = 8100.98	8%	It is not satisfactory.

Sl. No	Ratios	Particulars (Rs in millions)	Values	Remarks
12.	**Return on Capital Employed** = $\frac{\text{Operating Profit} * 100}{\text{Average Capital Employed}}$	Operating Profit = 2968.95 Avg. Capital Employed = 25762.88	11.52%	It is not satisfactory
13.	**Cost of Goods Sold Ratio** = $\frac{\text{Cost of Goods Sold}}{\text{Sales}}$	Cost of goods sold = 296.92 Sales = 5889.49	0.05	It is good.
14.	**Operating Ratio** = $\frac{\text{Cost of Goods sold} + \text{otherExpenses}}{\text{Sales}}$	Other Expenses = 2622.84	0.49	It is not good.
15.	**Fixed Assets turnover** = $\frac{\text{Sales}}{\text{Fixed assets}}$	Fixed Assets = 5147.21 Sales = 5889.49	1.14	It is not safe.

4.1.5.4 Summary for Balance Sheet and Profit & Loss Statement

Table 4.34: Summary of Balance Sheet

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Current Assets	11953.04	13592.76	15089.9	Current Assets have increased.
Fixed Assets	5147.21	5778.49	6387.11	Fixed Assets have increased marginally.
Current Liabilities	8979.30	10534.90	11914.43	Liabilities have increased. Liquidity position not affected.
Long term Liabilities	9598.29	6642.86	4785.71	Long term debts have been paid off.

Table 4.35: Summary of Profit & Loss Statement

	2007 (Rs in millions)	2008 (Rs in millions)	2009 (Rs in millions)	Remarks
Sales	5889.49	9801.22	9,772.79	Sales have increased by 65.9 %
Raw Material Cost	296.92	315.58	917.77	Expenses have increased.
Operating Profit	2968.95	5593.44	4,707.99	Operating profit has increased.
Profit Bef. Tax (PBT)	1239.41	4152.78	3,775.18	PBT has increased.
Net profit	648.67	2708.14	2,439.19	Net profit has increased by 276 %

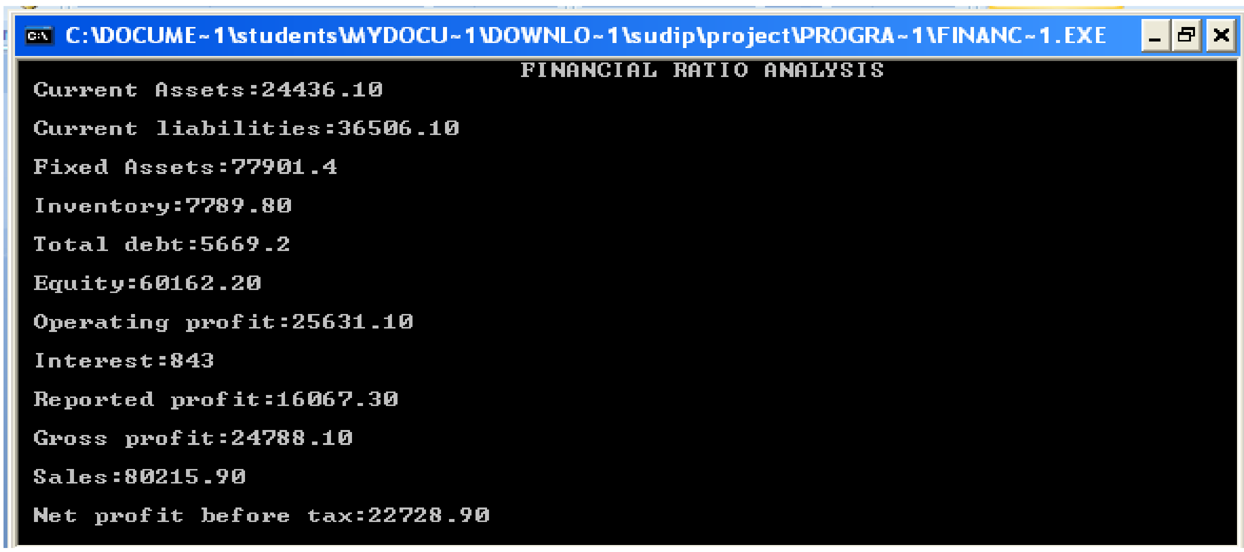
4.2 RATIO ANALYSIS USING TURBO C++

The ratio analysis of all the five companies from 2004-09 using Turbo C++ has been carried out.

The output of the program is given below:

4.2.1 ACC LTD.

4.2.1.1 Ratio Analysis for 2009



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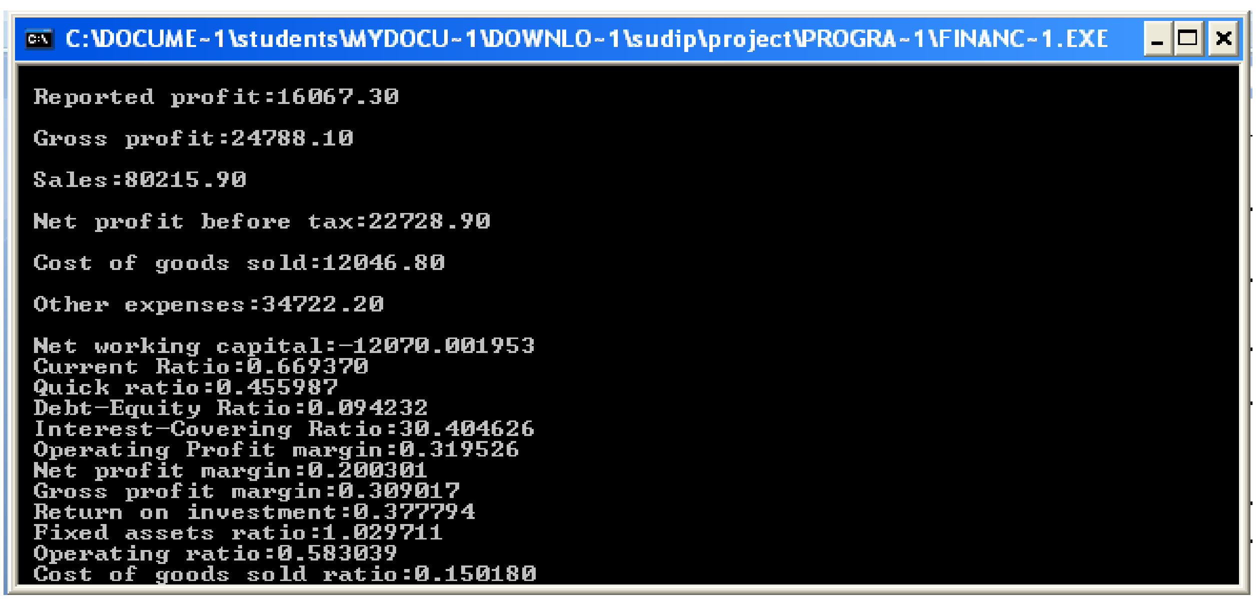
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE
                                FINANCIAL RATIO ANALYSIS
Current Assets:24436.10
Current liabilities:36506.10
Fixed Assets:77901.4
Inventory:7789.80
Total debt:5669.2
Equity:60162.20
Operating profit:25631.10
Interest:843
Reported profit:16067.30
Gross profit:24788.10
Sales:80215.90
Net profit before tax:22728.90
```



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C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE
Reported profit:16067.30
Gross profit:24788.10
Sales:80215.90
Net profit before tax:22728.90
Cost of goods sold:12046.80
Other expenses:34722.20
Net working capital:-12070.001953
Current Ratio:0.669370
Quick ratio:0.455987
Debt-Equity Ratio:0.094232
Interest-Covering Ratio:30.404626
Operating Profit margin:0.319526
Net profit margin:0.200301
Gross profit margin:0.309017
Return on investment:0.377794
Fixed assets ratio:1.029711
Operating ratio:0.583039
Cost of goods sold ratio:0.150180
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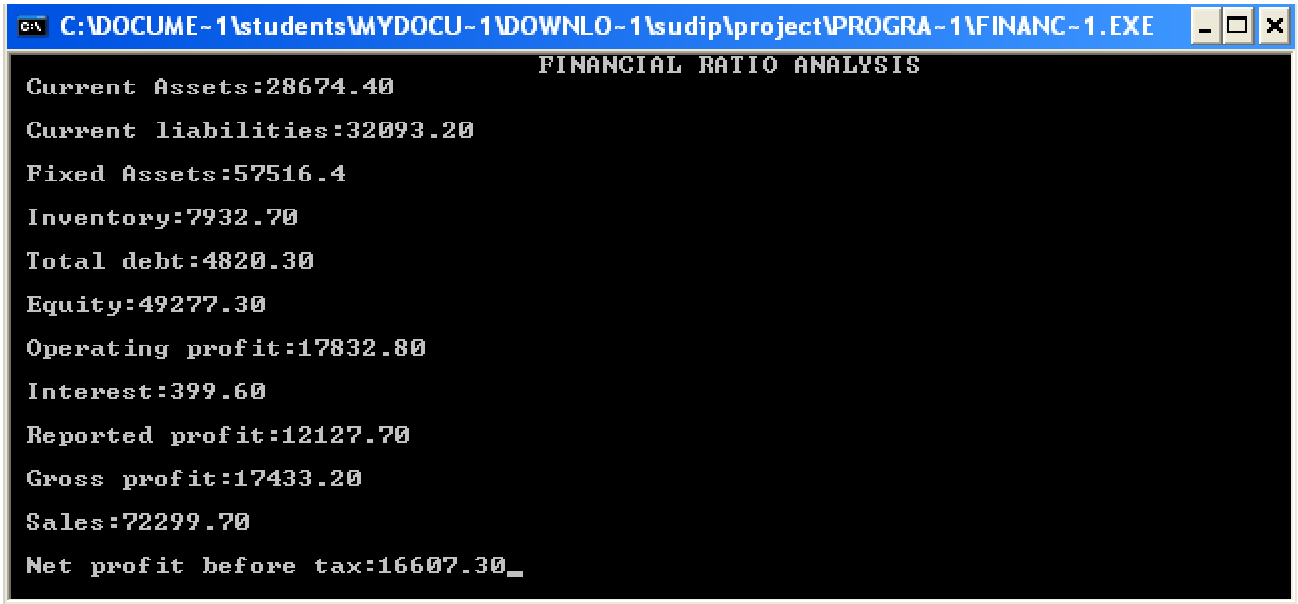
Fig. 4.1: Ratio Analysis of ACC Ltd. for 2009

4.2.1.2 Ratio Analysis of ACC Ltd. 2008



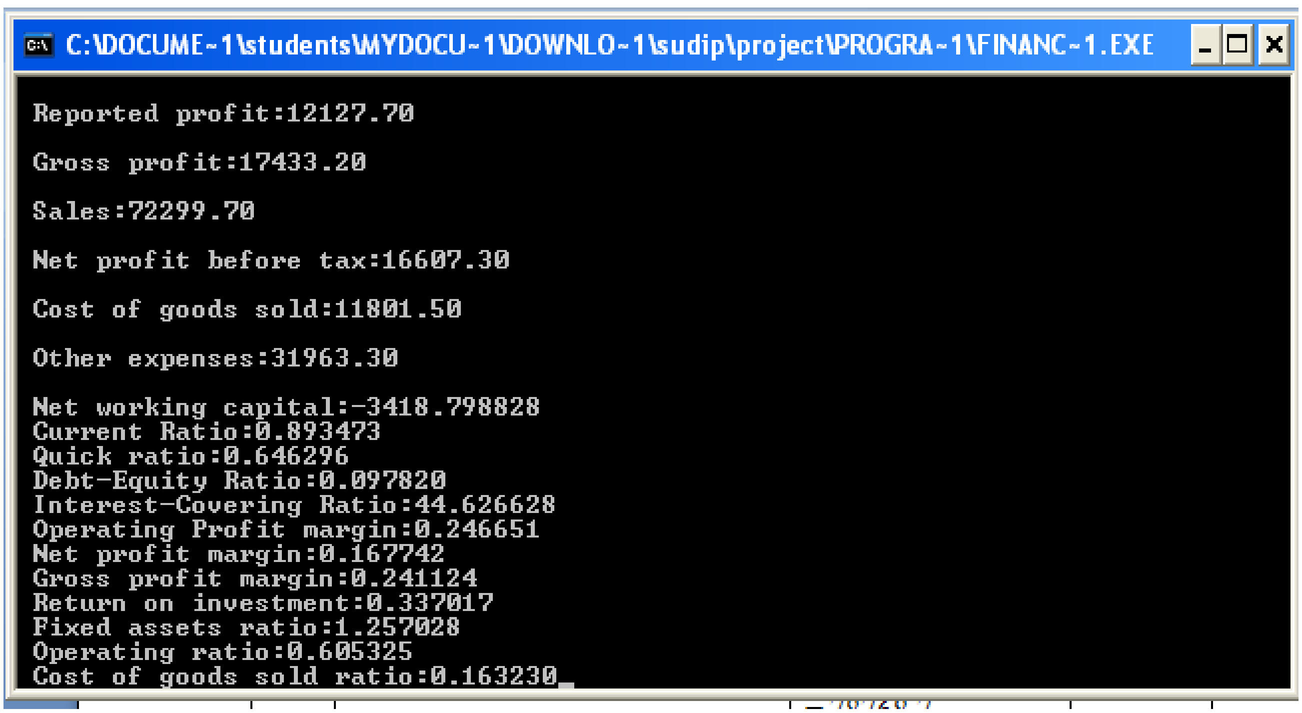


Fig. 4.2: Ratio Analysis of ACC Ltd. for 2008

4.2.1.3 Ratio Analysis for 2007

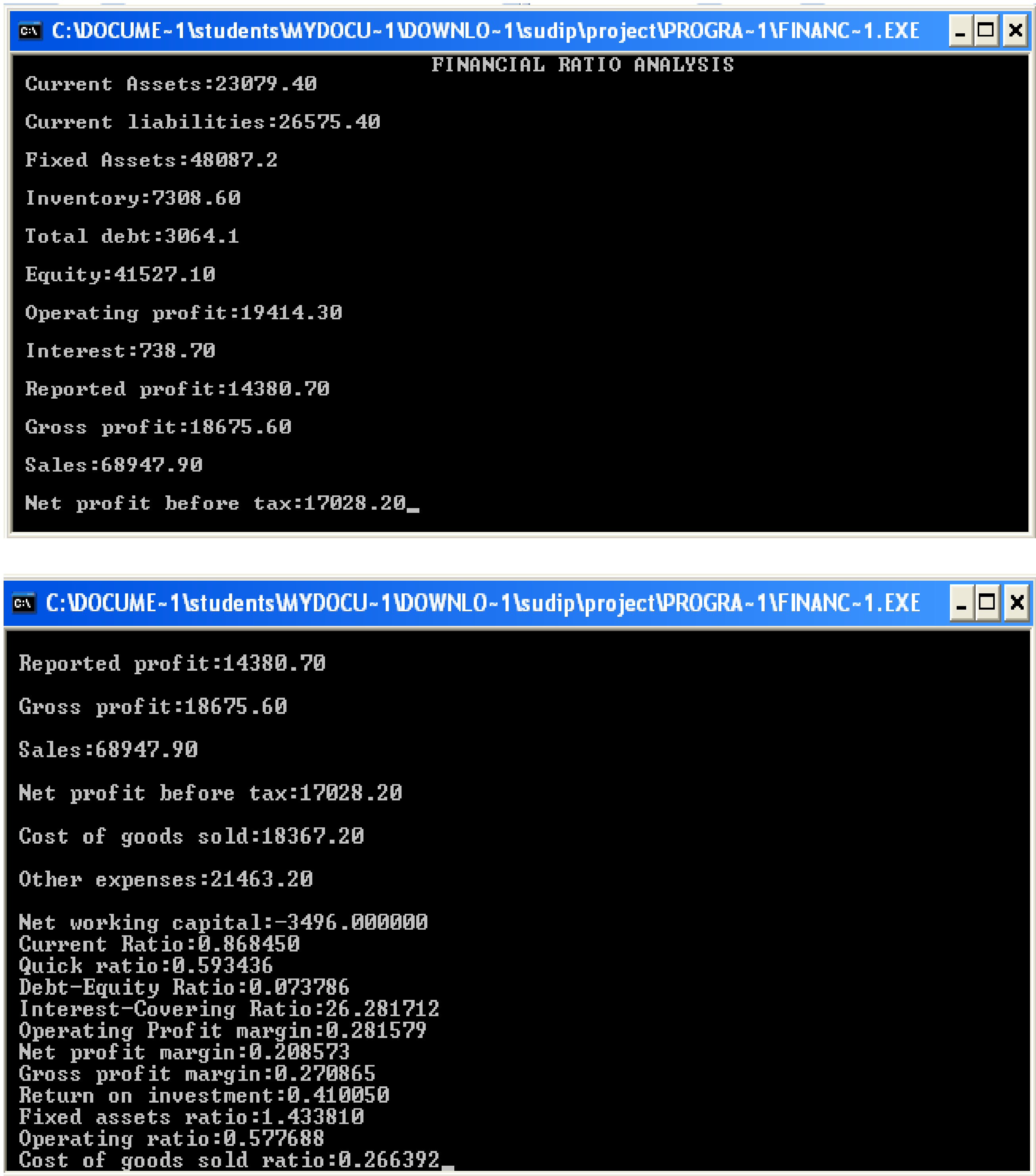
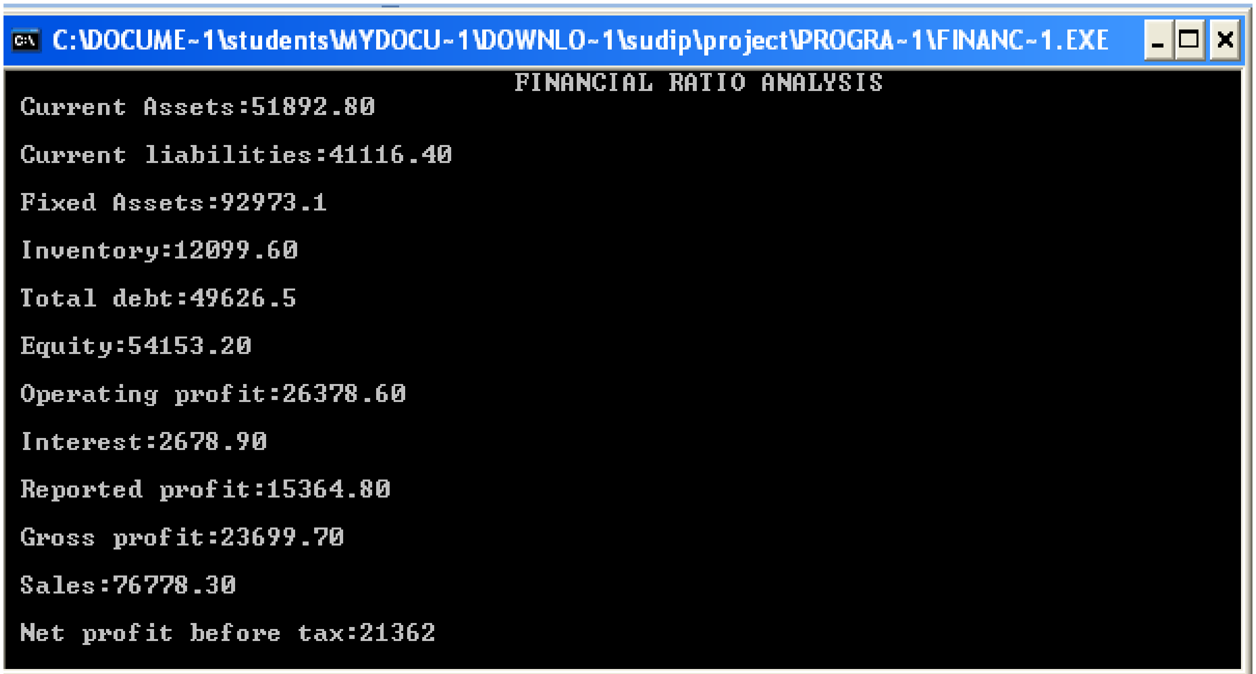


Fig. 4.3: Ratio Analysis of ACC Ltd. for 2007

4.2.2 Jindal Steel & Power Ltd.

4.2.2.1 Ratio Analysis for 2009



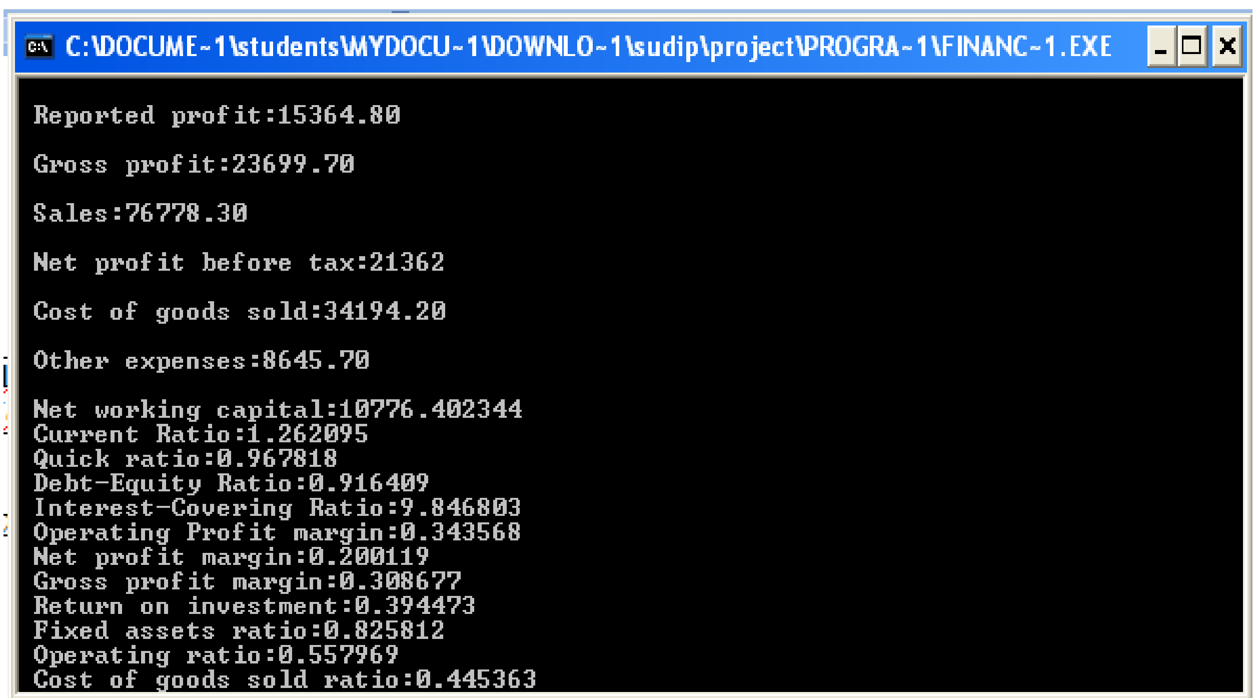
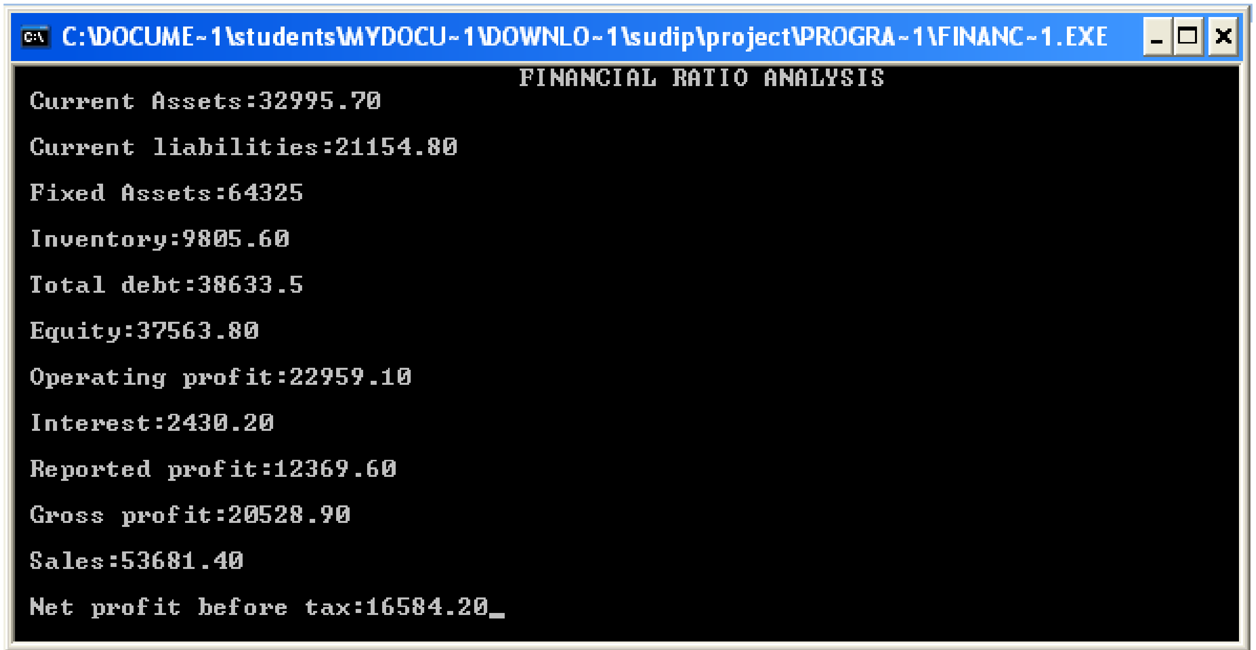


Fig. 4.4 : Ratio Analysis of Jindal Steel & Power Ltd. for 2009

4.2.2.2 Ratio Analysis for 2008



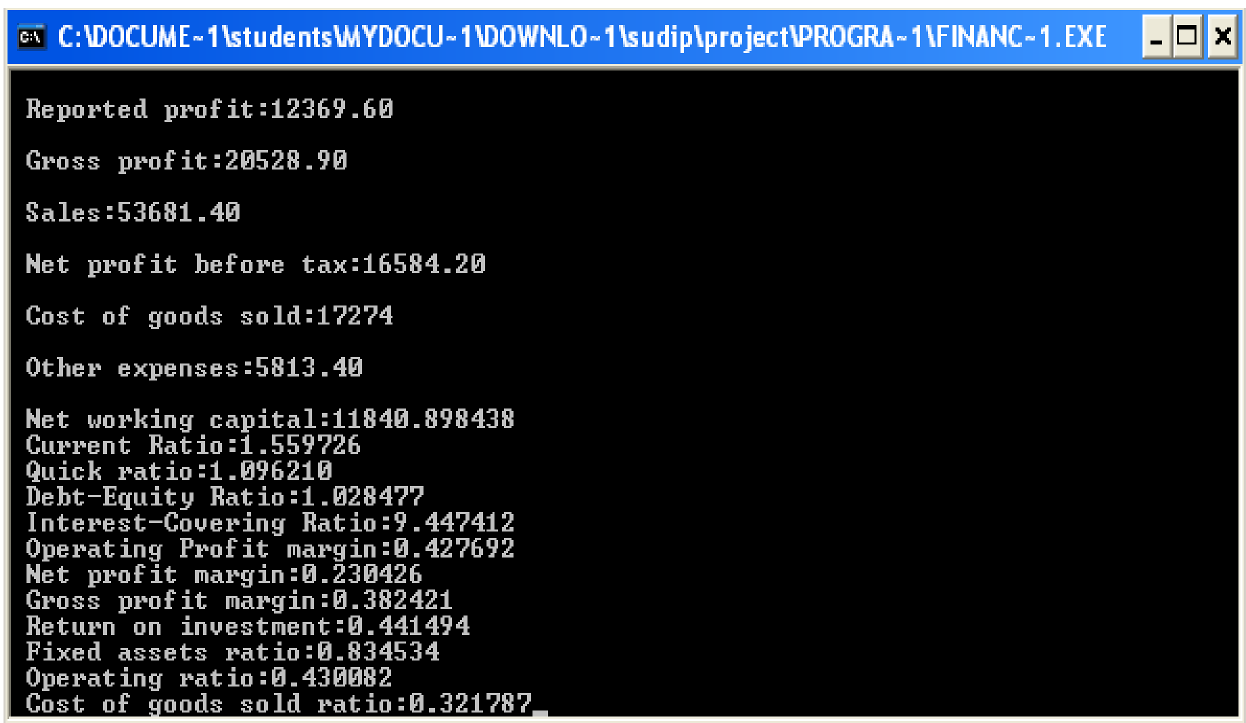
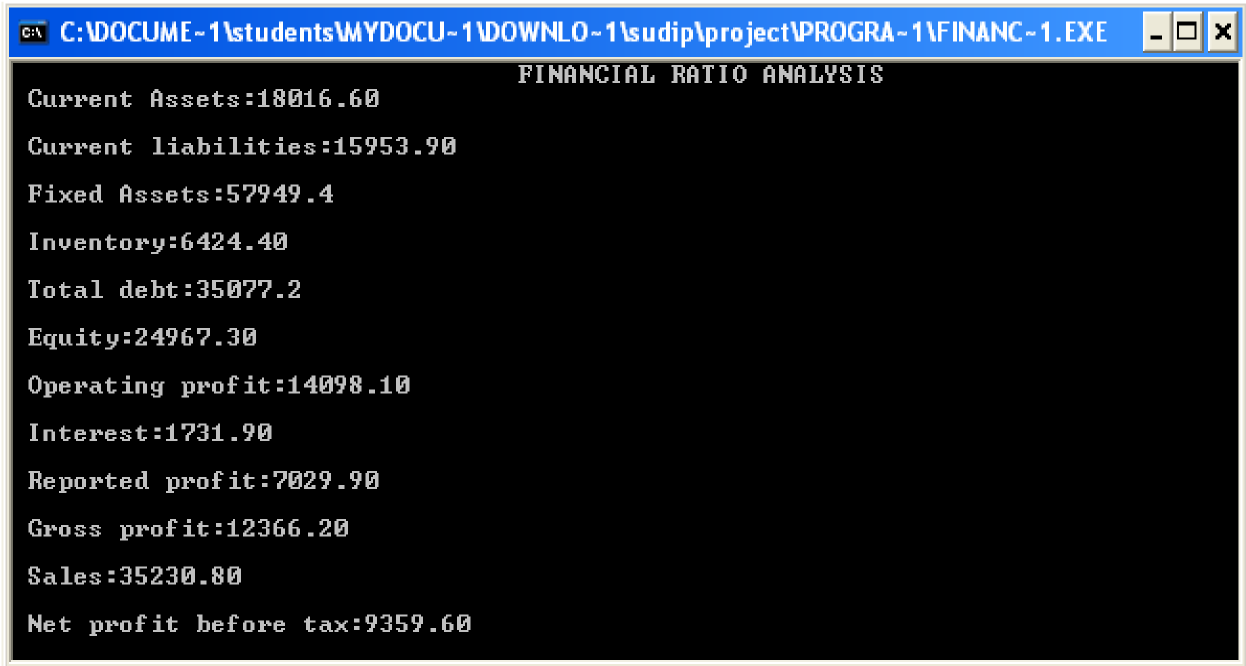


Fig. 4.5: Ratio Analysis of Jindal Steel & Power Ltd. for 2008

4.2.2.3 Ratio Analysis for 2007



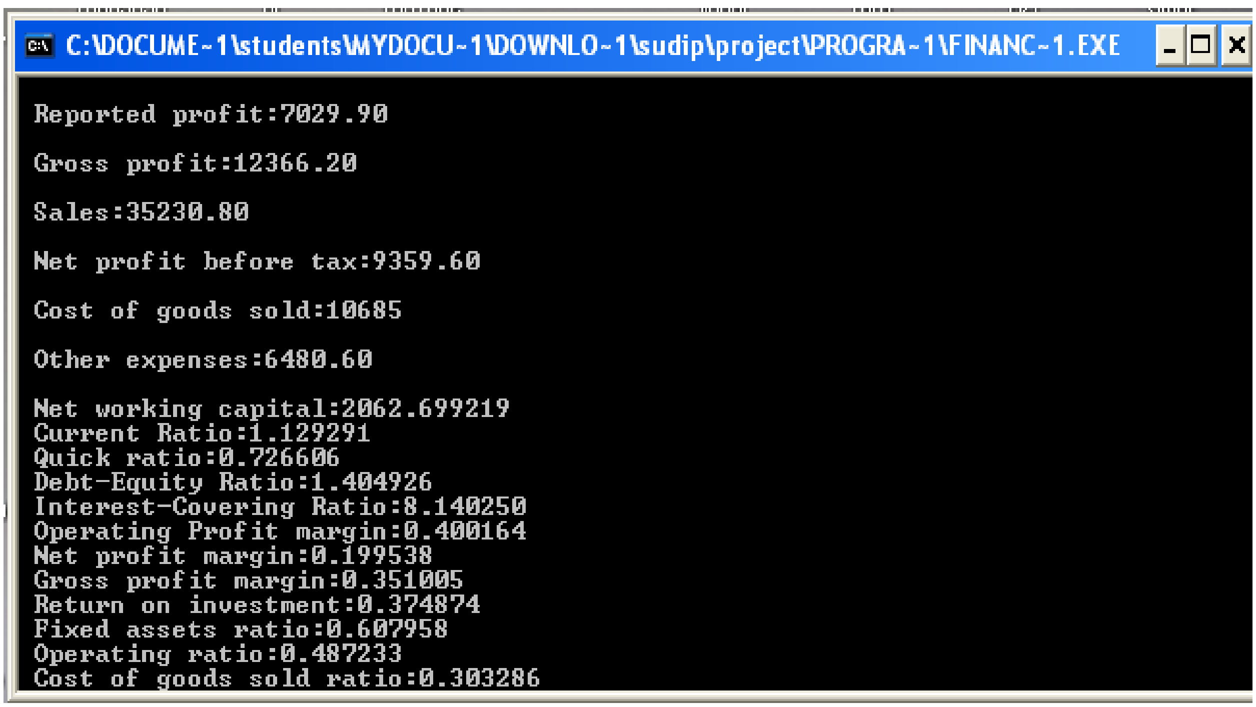
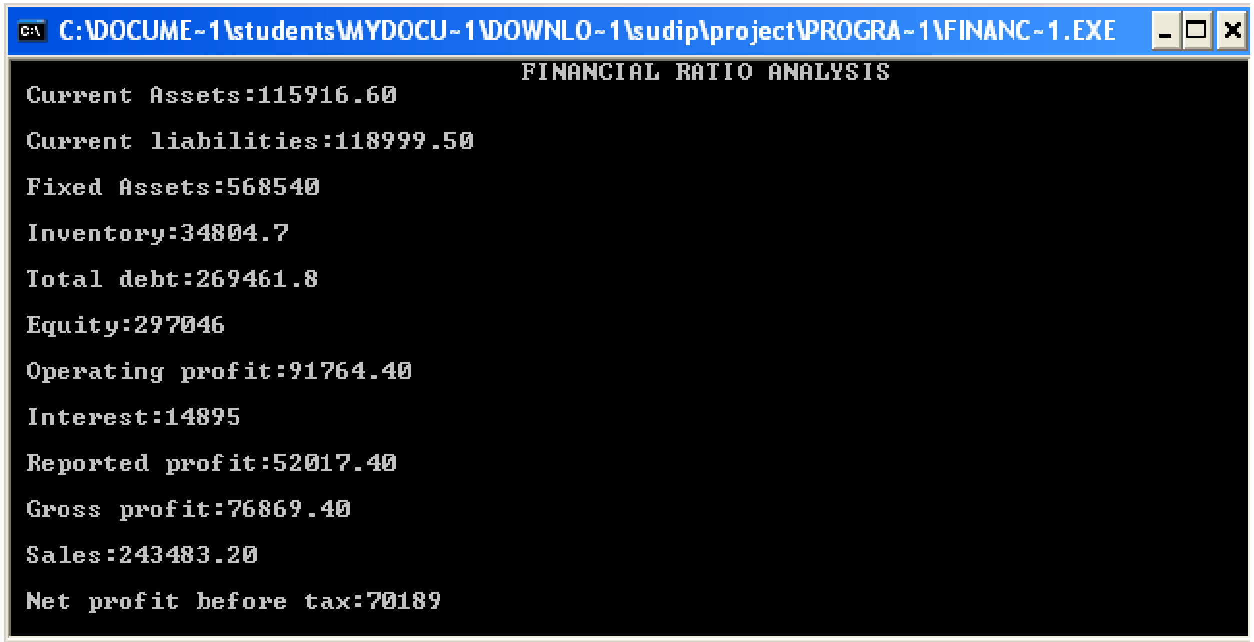


Fig. 4.6: Ratio Analysis of Jindal Steel & Power Ltd. for 2007

4.2.3 Tata Steel

4.2.3.1 Ratio Analysis for 2009



```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE
                              FINANCIAL RATIO ANALYSIS
Current Assets:115916.60

Current liabilities:118999.50

Fixed Assets:568540

Inventory:34804.7

Total debt:269461.8

Equity:297046

Operating profit:91764.40

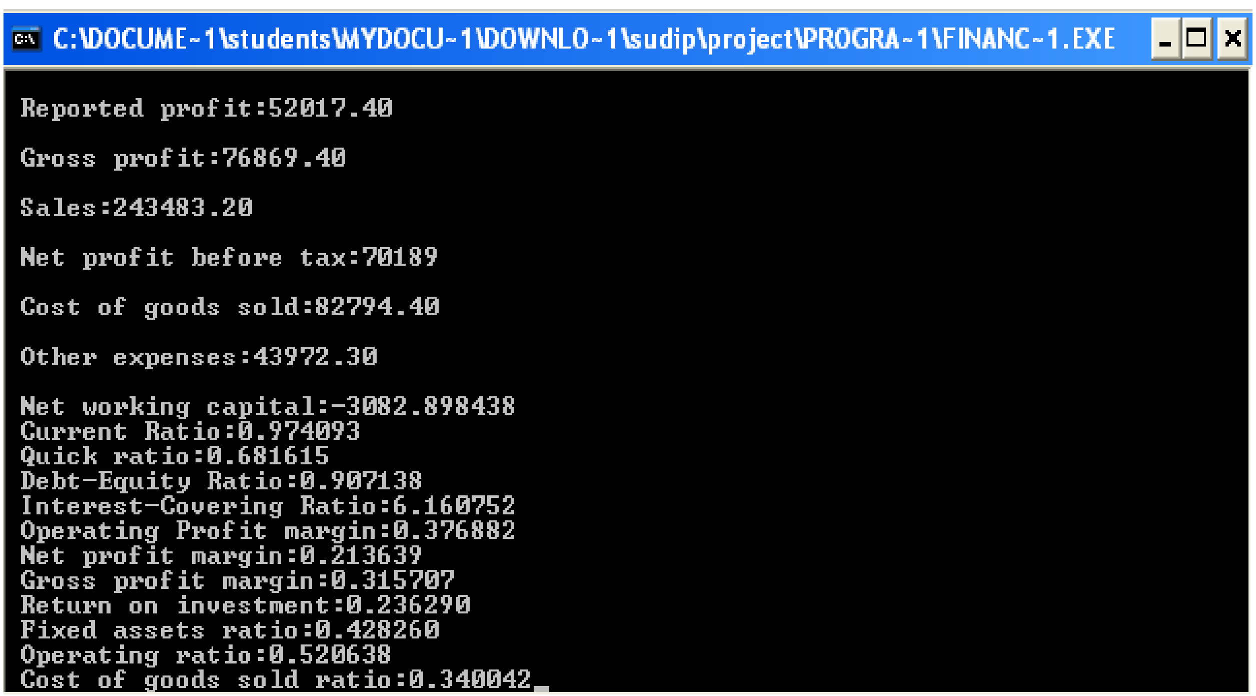
Interest:14895

Reported profit:52017.40

Gross profit:76869.40

Sales:243483.20

Net profit before tax:70189
```



```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE

Reported profit:52017.40

Gross profit:76869.40

Sales:243483.20

Net profit before tax:70189

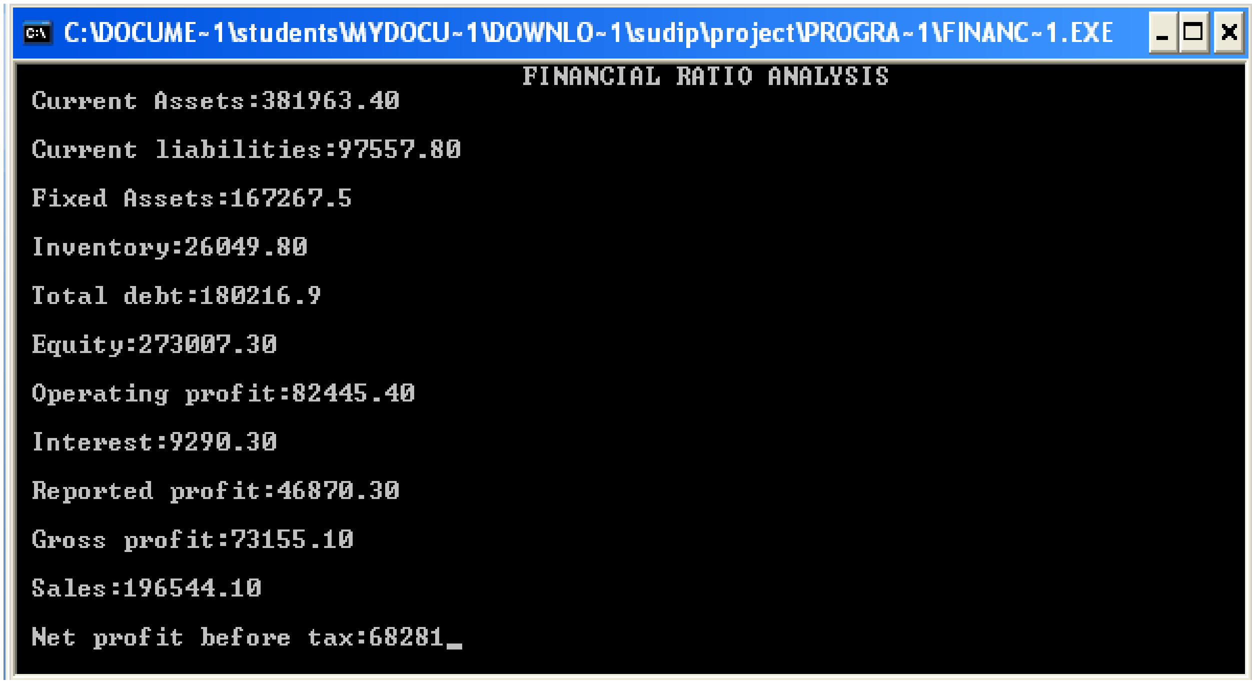
Cost of goods sold:82794.40

Other expenses:43972.30

Net working capital:-3082.898438
Current Ratio:0.974093
Quick ratio:0.681615
Debt-Equity Ratio:0.907138
Interest-Covering Ratio:6.160752
Operating Profit margin:0.376882
Net profit margin:0.213639
Gross profit margin:0.315707
Return on investment:0.236290
Fixed assets ratio:0.428260
Operating ratio:0.520638
Cost of goods sold ratio:0.340042
```

Fig. 4.7 : Ratio Analysis of Tata Steel for 2009

4.2.3.2 Ratio Analysis for 2008



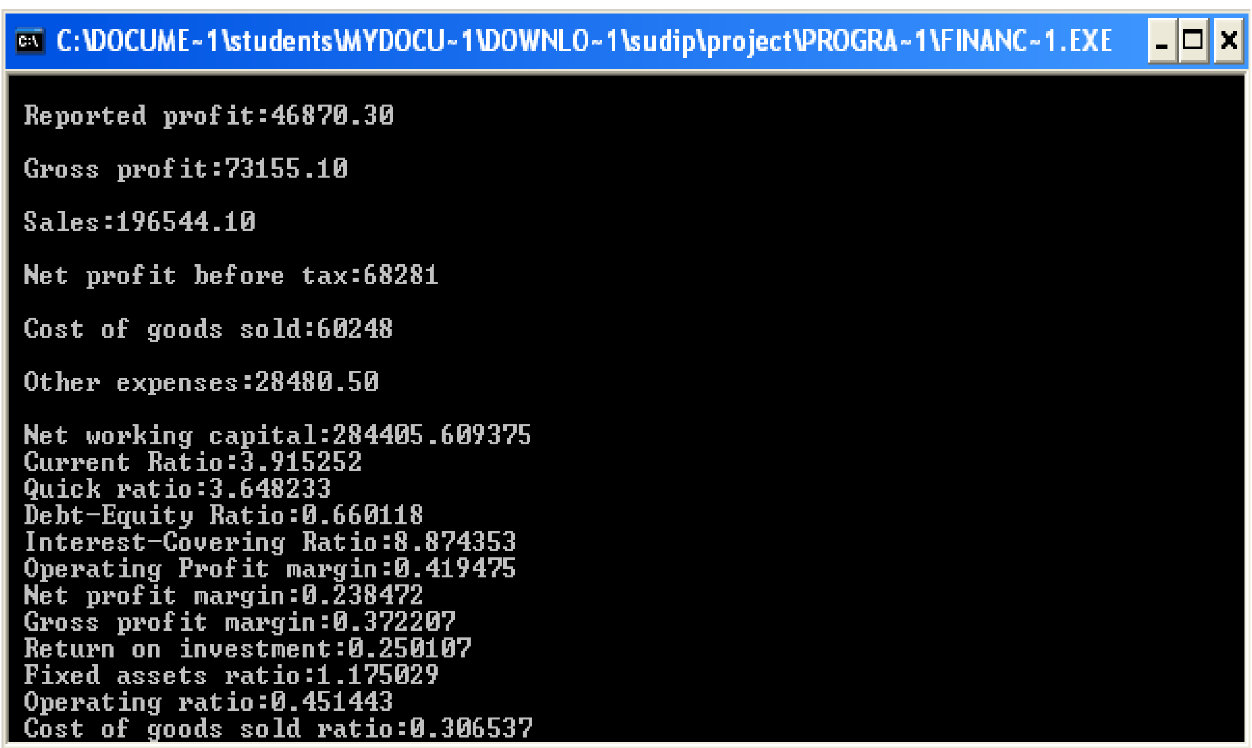


Fig. 4.8: Ratio Analysis of Tata Steel for 2008

4.2.3.3 Ratio Analysis for 2007

```
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                                FINANCIAL RATIO ANALYSIS
Current Assets:146719.10

Current liabilities:82797

Fixed Assets:171467.4

Inventory:23329.80

Total debt:96453.3

Equity:140961.50

Operating profit:69137.50

Interest:2512.50

Reported profit:42221.50

Gross profit:66625

Sales:174526.60

Net profit before tax:63283.50_
```

```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE

Reported profit:42221.50

Gross profit:66625

Sales:174526.60

Net profit before tax:63283.50

Cost of goods sold:56799.50

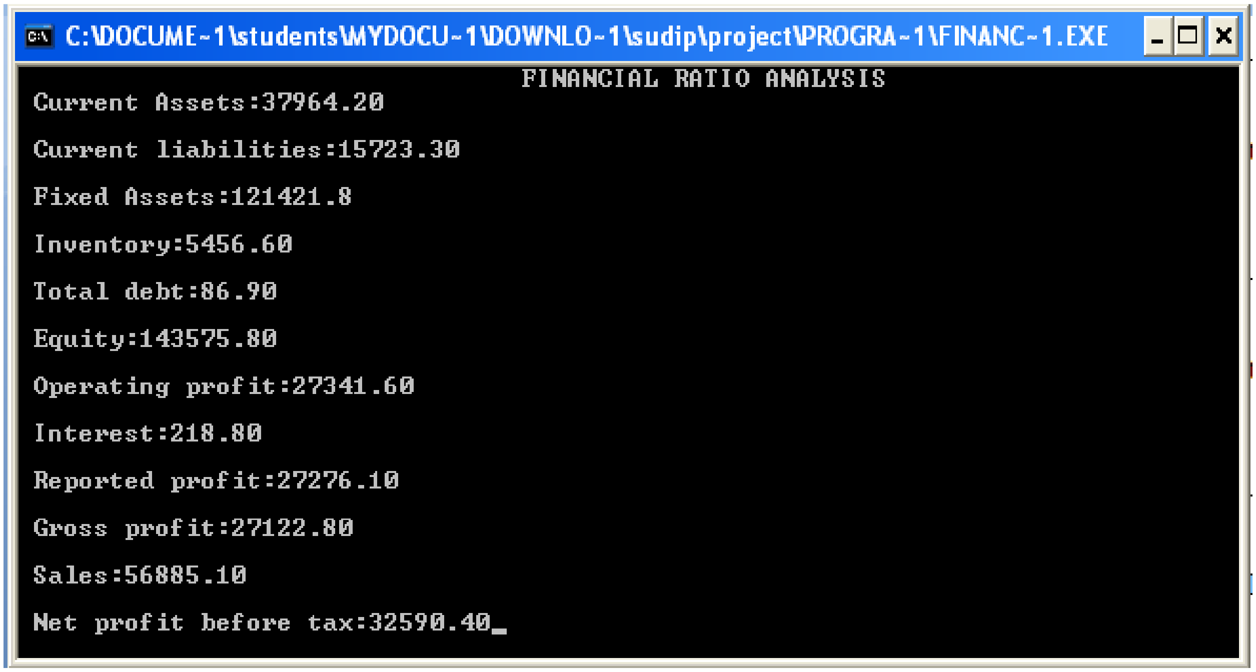
Other expenses:25547.80

Net working capital:63922.093750
Current Ratio:1.772034
Quick ratio:1.490263
Debt-Equity Ratio:0.684253
Interest-Covering Ratio:27.517413
Operating Profit margin:0.396143
Net profit margin:0.241920
Gross profit margin:0.381747
Return on investment:0.448942
Fixed assets ratio:1.017841
Operating ratio:0.471832
Cost of goods sold ratio:0.325449
```

Fig. 4.9 : Ratio Analysis of Tata Steel for 2007

4.2.4 Hindustan Zinc Limited

4.2.4.1 Ratio Analysis for 2009



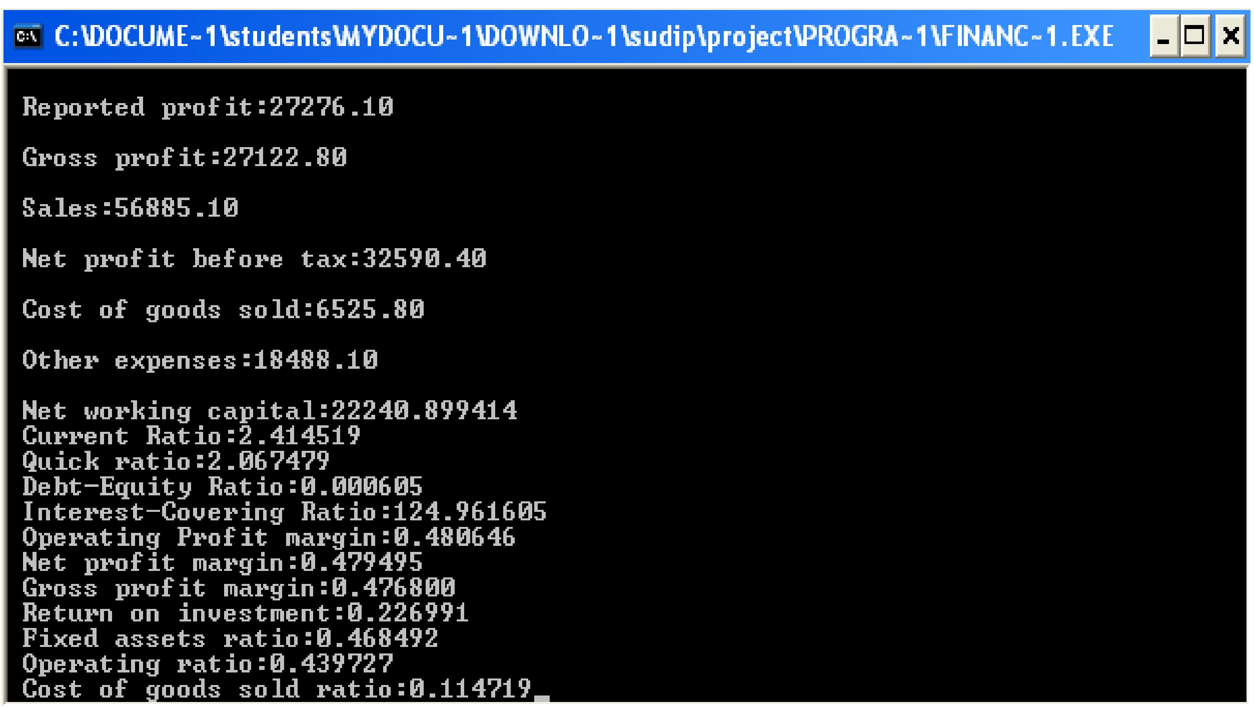


Fig. 4.10: Ratio Analysis of HZL for 2009

4.2.4.2 Ratio Analysis for 2008

```
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                                FINANCIAL RATIO ANALYSIS
Current Assets:27148.70

Current liabilities:13613.60

Fixed Assets:104950.7

Inventory:5181

Total debt:3.90

Equity:118481.90

Operating profit:53979.80

Interest:230.50

Reported profit:43960.70

Gross profit:53749.30

Sales:78954.70

Net profit before tax:56845.40_
```

```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE

Reported profit:43960.70

Gross profit:53749.30

Sales:78954.70

Net profit before tax:56845.40

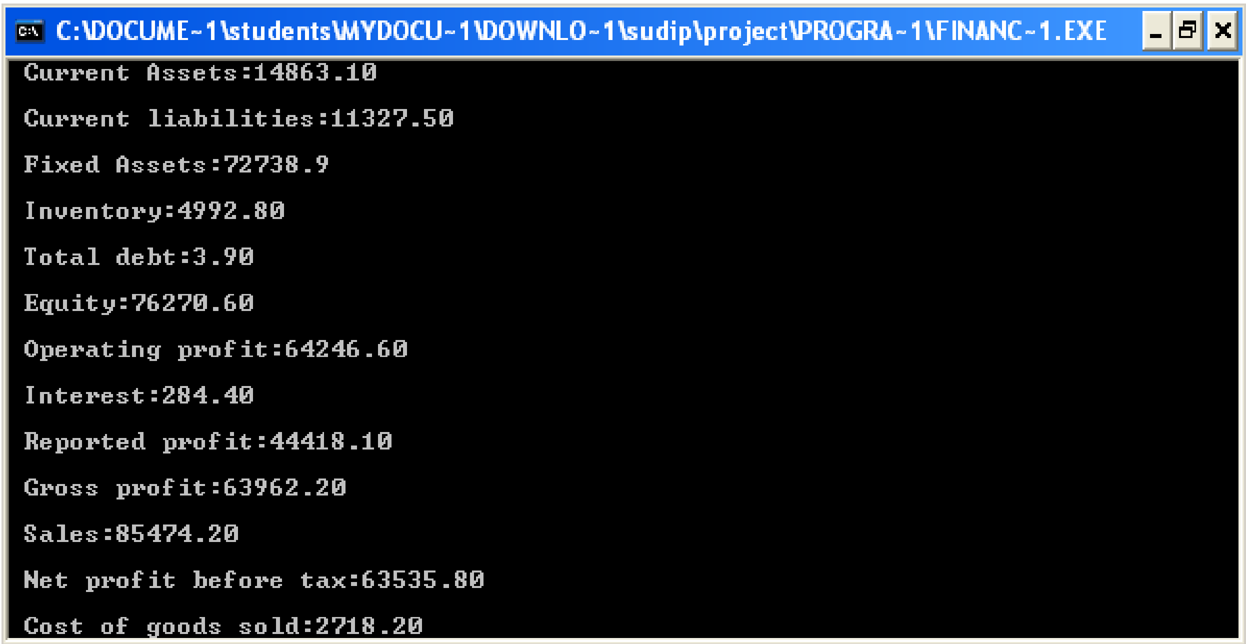
Cost of goods sold:5338.20

Other expenses:11222.30

Net working capital:13535.099609
Current Ratio:1.994234
Quick ratio:1.613658
Debt-Equity Ratio:0.000033
Interest-Covering Ratio:234.185687
Operating Profit margin:0.683681
Net profit margin:0.556784
Gross profit margin:0.680761
Return on investment:0.479781
Fixed assets ratio:0.752303
Operating ratio:0.209747
Cost of goods sold ratio:0.067611
```

Fig. 4.11 : Ratio Analysis of HZL for 2008

4.2.4.3 Ratio Analysis for 2007



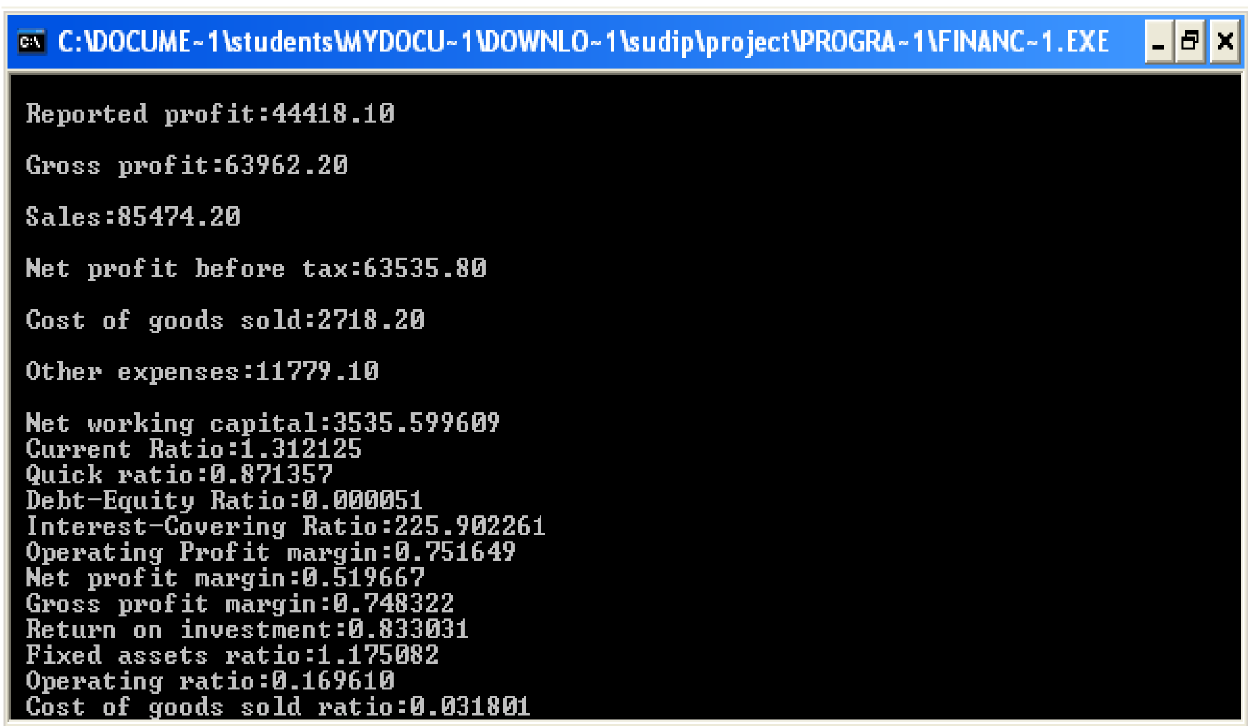
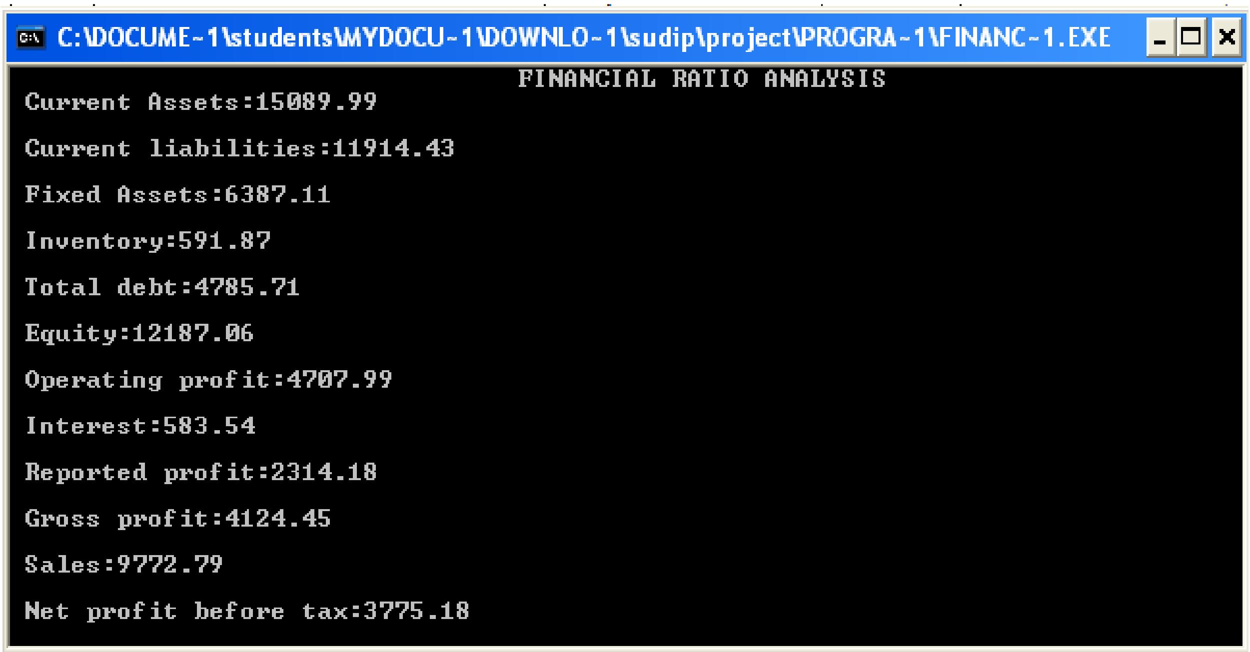


Fig. 4.12: Ratio Analysis of HZL for 2007

4.2.5 Gujarat Mineral Development Corporation

4.2.5.1 Ratio Analysis for 2009



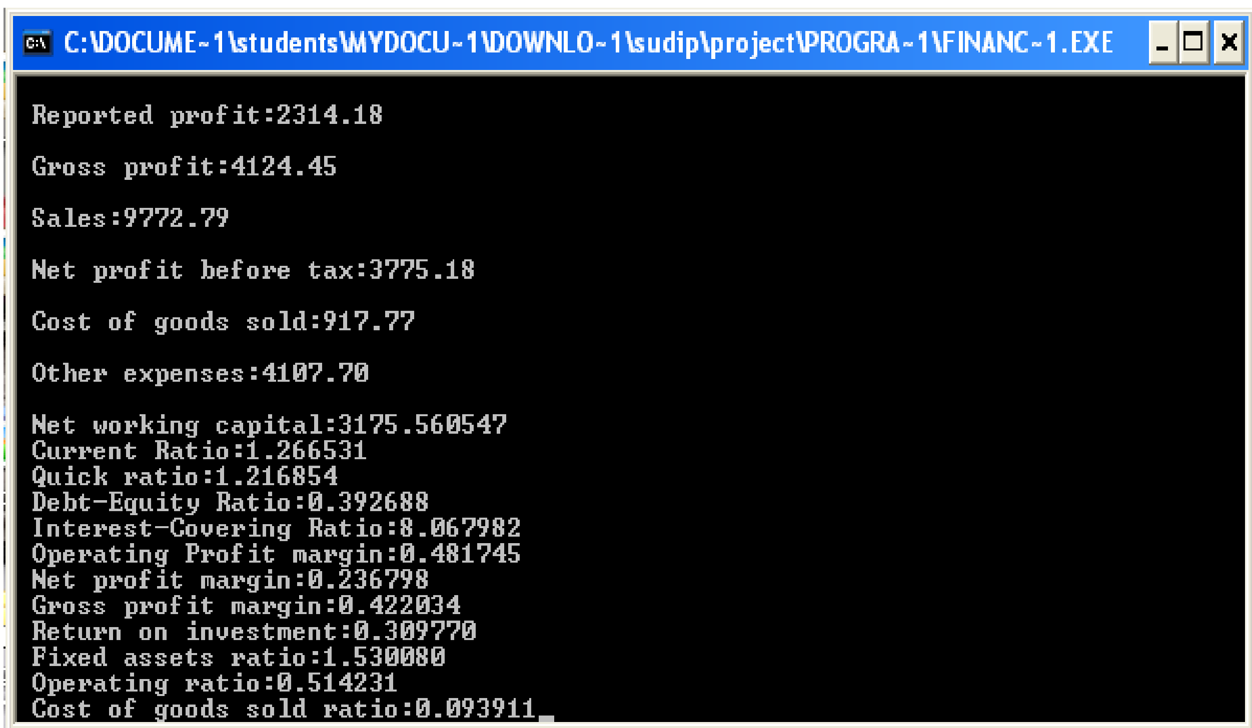
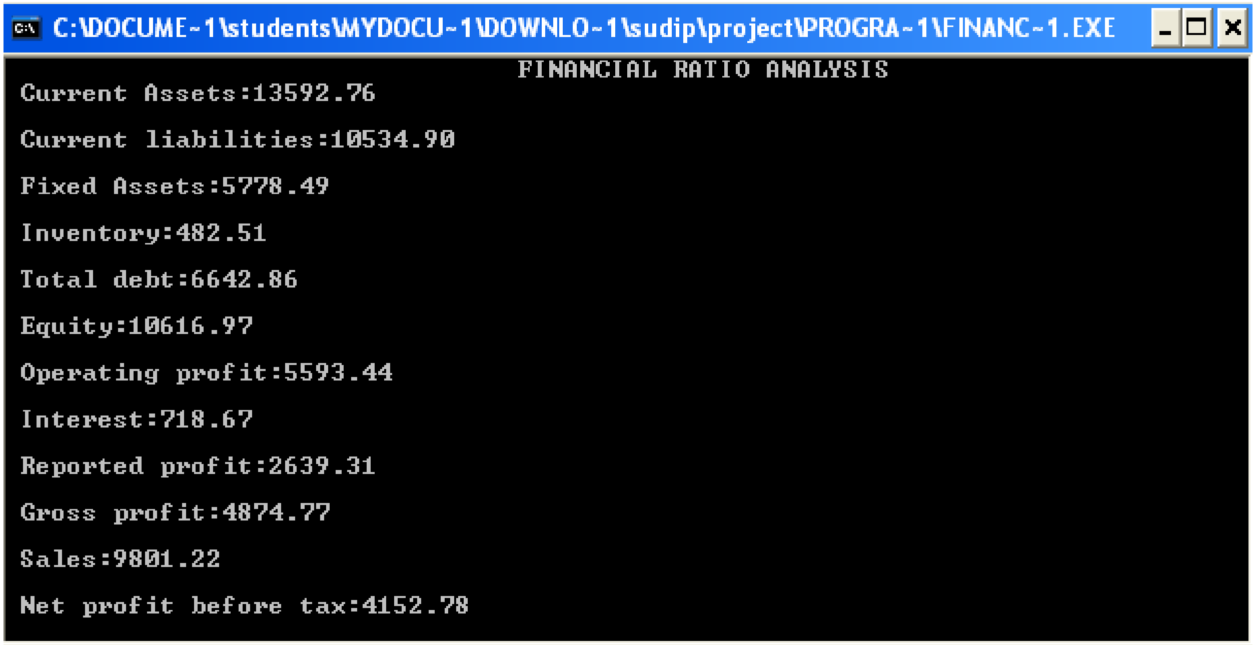


Fig. 4.13: Ratio Analysis of GMDC for 2009

4.2.5.2 Ratio Analysis for 2008



```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE
                                FINANCIAL RATIO ANALYSIS
Current Assets:13592.76

Current liabilities:10534.90

Fixed Assets:5778.49

Inventory:482.51

Total debt:6642.86

Equity:10616.97

Operating profit:5593.44

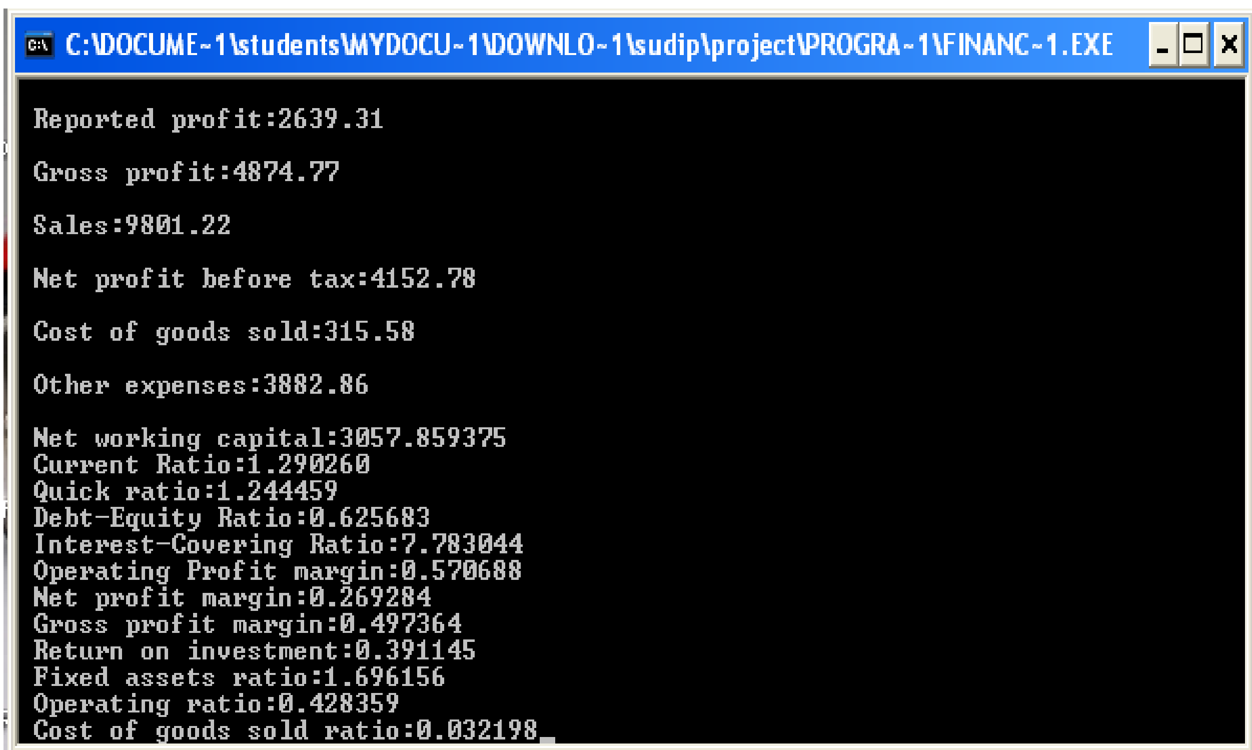
Interest:718.67

Reported profit:2639.31

Gross profit:4874.77

Sales:9801.22

Net profit before tax:4152.78
```



```
C:\DOCUME~1\students\MYDOCU~1\DOWNLO~1\sudip\project\PROGRA~1\FINANC~1.EXE

Reported profit:2639.31

Gross profit:4874.77

Sales:9801.22

Net profit before tax:4152.78

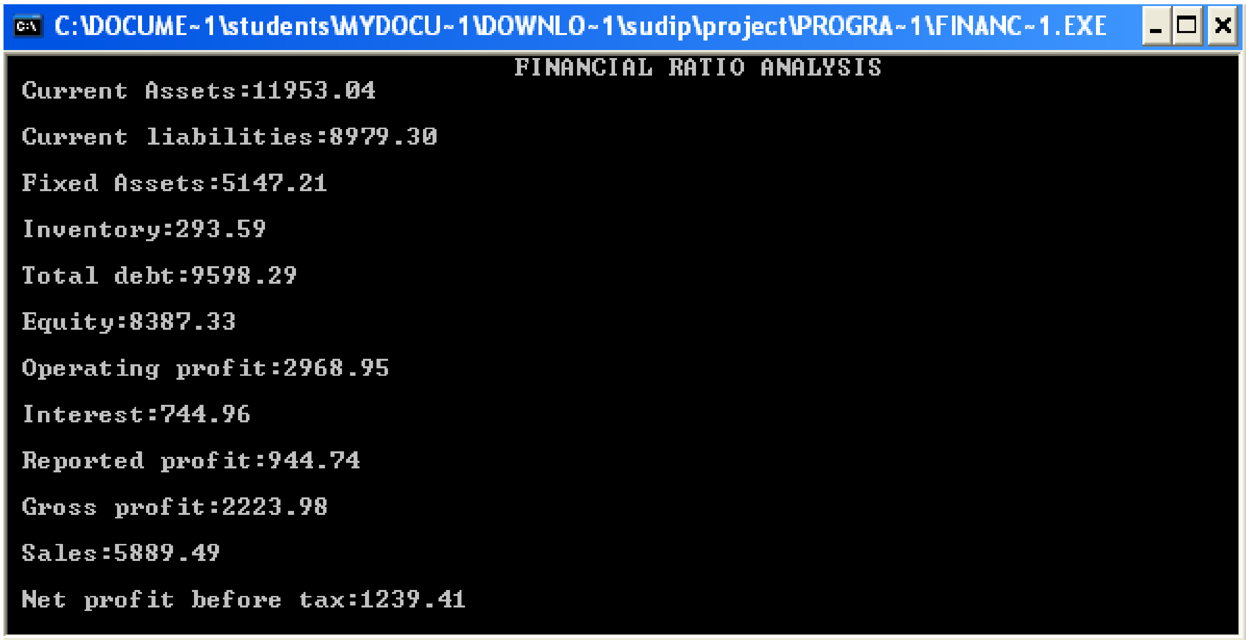
Cost of goods sold:315.58

Other expenses:3882.86

Net working capital:3057.859375
Current Ratio:1.290260
Quick ratio:1.244459
Debt-Equity Ratio:0.625683
Interest-Covering Ratio:7.783044
Operating Profit margin:0.570688
Net profit margin:0.269284
Gross profit margin:0.497364
Return on investment:0.391145
Fixed assets ratio:1.696156
Operating ratio:0.428359
Cost of goods sold ratio:0.032198
```

Fig. 4.14: Ratio Analysis of GMDC for 2008

4.2.5.3 Ratio Analysis for 2007



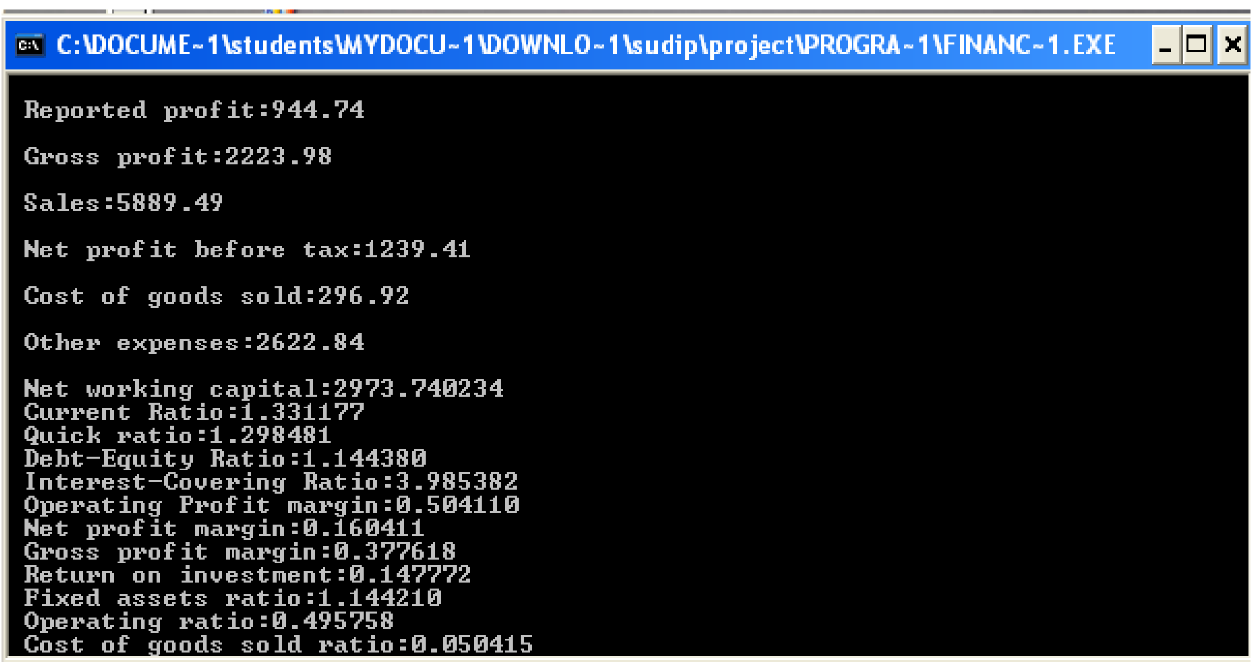


Fig. 4.15: Ratio Analysis of GMDC for 2007

4.3 RATIO ANALYSIS USING TALLY 9.0

Tally 9.0 manufactured by Tally Solutions FZ LLC, Dubai, and Tally India Private Limited. It facilitates smooth and error free Excise Accounting for manufacturers and dealers engaged in manufacturing or trading of excisable goods. It is mainly used for the calculation of excise duties, taxes and other transactions. In this project Tally 9.0 is used to compute the balance sheet and the financial ratios of companies that can be obtained from it. However Tally 9.0 has certain limitations. It has been used to calculate only current ratio, quick ratio and debt – equity ratio. In future the version can be modified to calculate other ratios.

Preparation of balance sheet and ratio analysis of all the five companies from 2004-09 using Tally 9.0 has been carried out below:

4.3.1 ACC Ltd.

4.3.1.1 Balance Sheet and Ratio Analysis For 2009

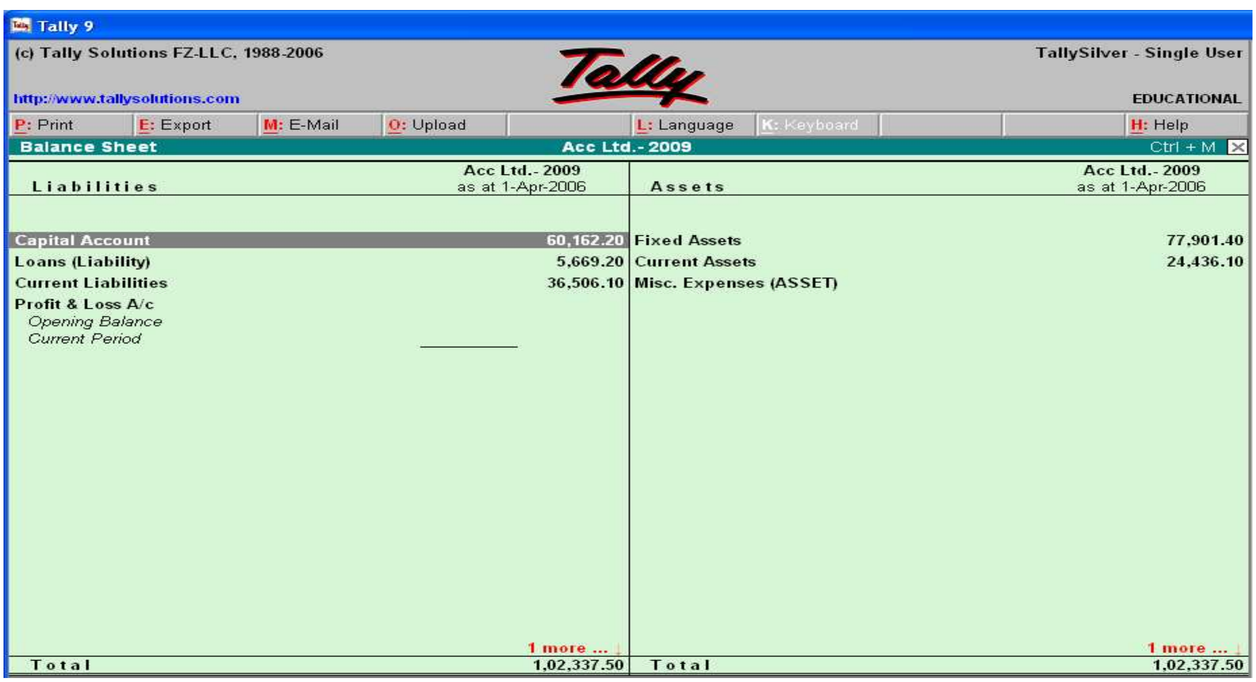
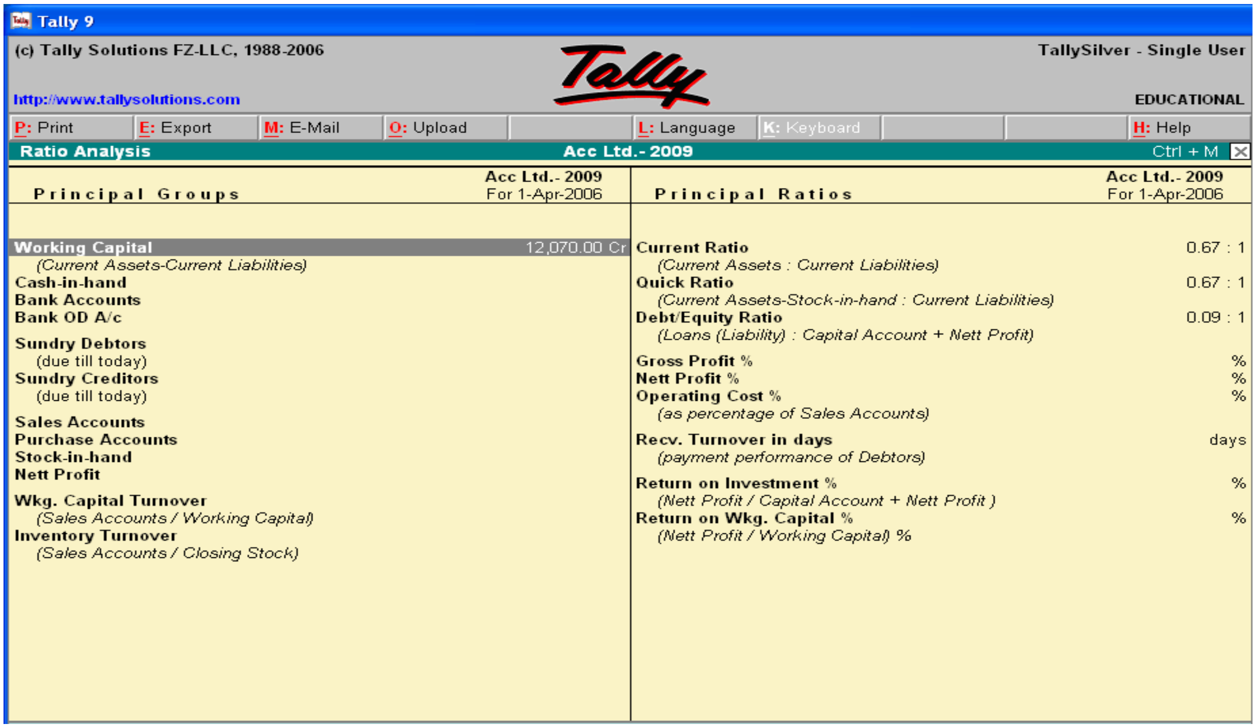


Fig. 4.16: Preparation of Balance Sheet of ACC Ltd. for 2009



Tally 9

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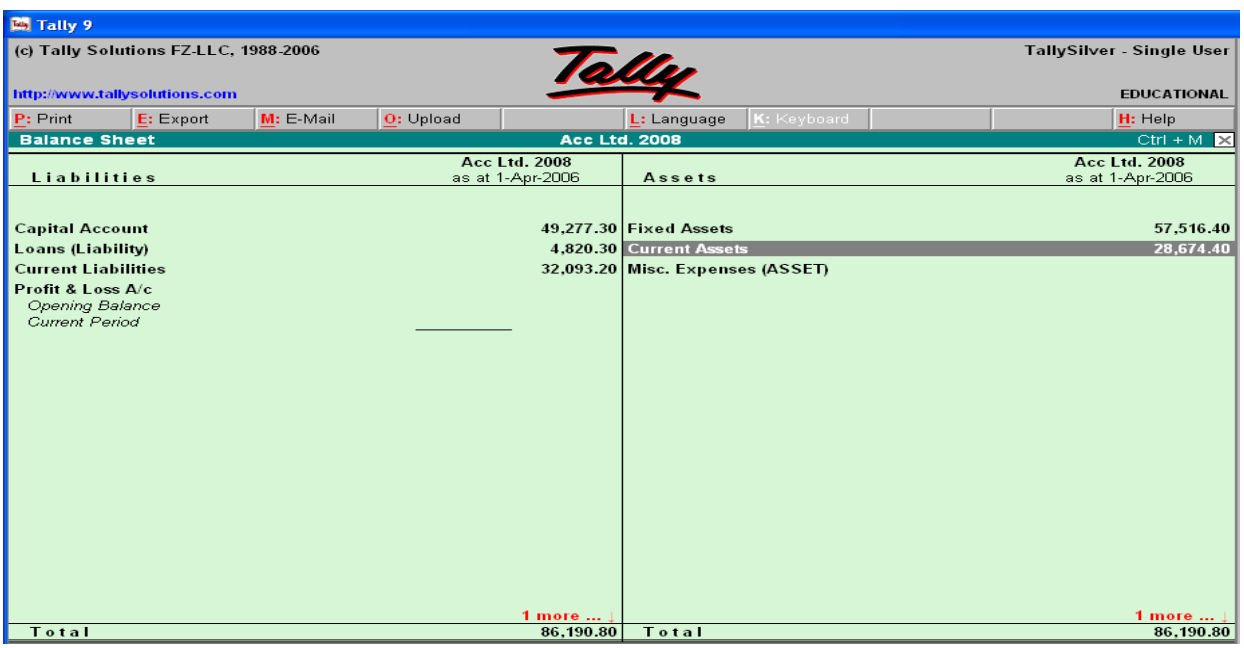
Ratio Analysis | Acc Ltd.- 2009 | Ctrl + M

Principal Groups	Acc Ltd.- 2009 For 1-Apr-2006	Principal Ratios	Acc Ltd.- 2009 For 1-Apr-2006
Working Capital	12,070.00 Cr	**Current Ratio**	0.67 : 1
(Current Assets-Current Liabilities)		*(Current Assets : Current Liabilities)*	
Cash-in-hand		**Quick Ratio**	0.67 : 1
Bank Accounts		*(Current Assets-Stock-in-hand : Current Liabilities)*	
Bank OD A/c		**Debt/Equity Ratio**	0.09 : 1
		(Loans (Liability) : Capital Account + Nett Profit)	
Sundry Debtors		**Gross Profit %**	%
(due till today)		**Nett Profit %**	%
Sundry Creditors		**Operating Cost %**	%
(due till today)		*(as percentage of Sales Accounts)*	
Sales Accounts		**Recv. Turnover in days**	days
Purchase Accounts		*(payment performance of Debtors)*	
Stock-in-hand			
Nett Profit		**Return on Investment %**	%
Wkg. Capital Turnover		*(Nett Profit / Capital Account + Nett Profit)*	
(Sales Accounts / Working Capital)		**Return on Wkg. Capital %**	%
Inventory Turnover		*(Nett Profit / Working Capital) %*	
(Sales Accounts / Closing Stock)			

Fig. 4.17: Ratio Analysis of ACC Ltd. For 2009

4.3.1.2 Balance Sheet and Ratio Analysis For 2008



Tally 9

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Balance Sheet | Acc Ltd. 2008 | Ctrl + M

Liabilities	Acc Ltd. 2008 as at 1-Apr-2006	Assets	Acc Ltd. 2008 as at 1-Apr-2006
Capital Account	49,277.30	**Fixed Assets**	57,516.40
Loans (Liability)	4,820.30	**Current Assets**	28,674.40
Current Liabilities	32,093.20	**Misc. Expenses (ASSET)**	
Profit & Loss A/c			
Opening Balance			
Current Period			
	1 more ...		1 more ...
Total	86,190.80	**Total**	86,190.80

Fig. 4.18: Preparation of Balance Sheet of ACC Ltd. for 2008

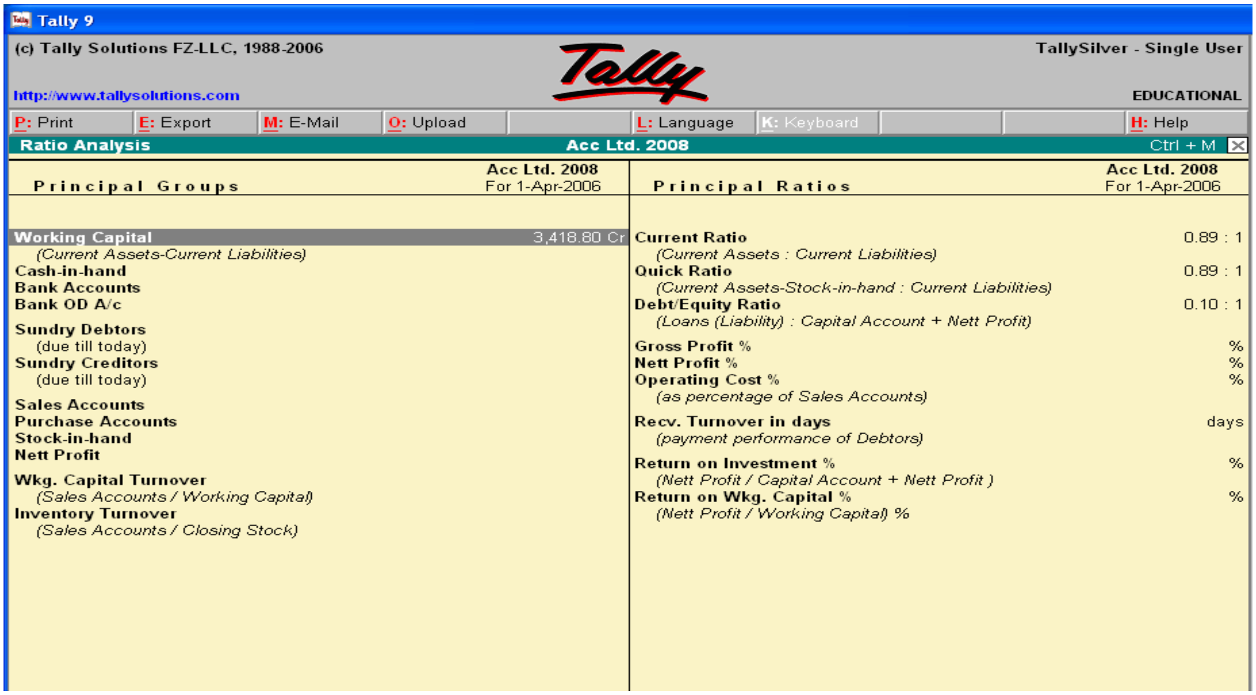


Fig. 4.19: Ratio Analysis of ACC Ltd. For 2008

4.3.1.3 Balance Sheet and Ratio Analysis For 2007

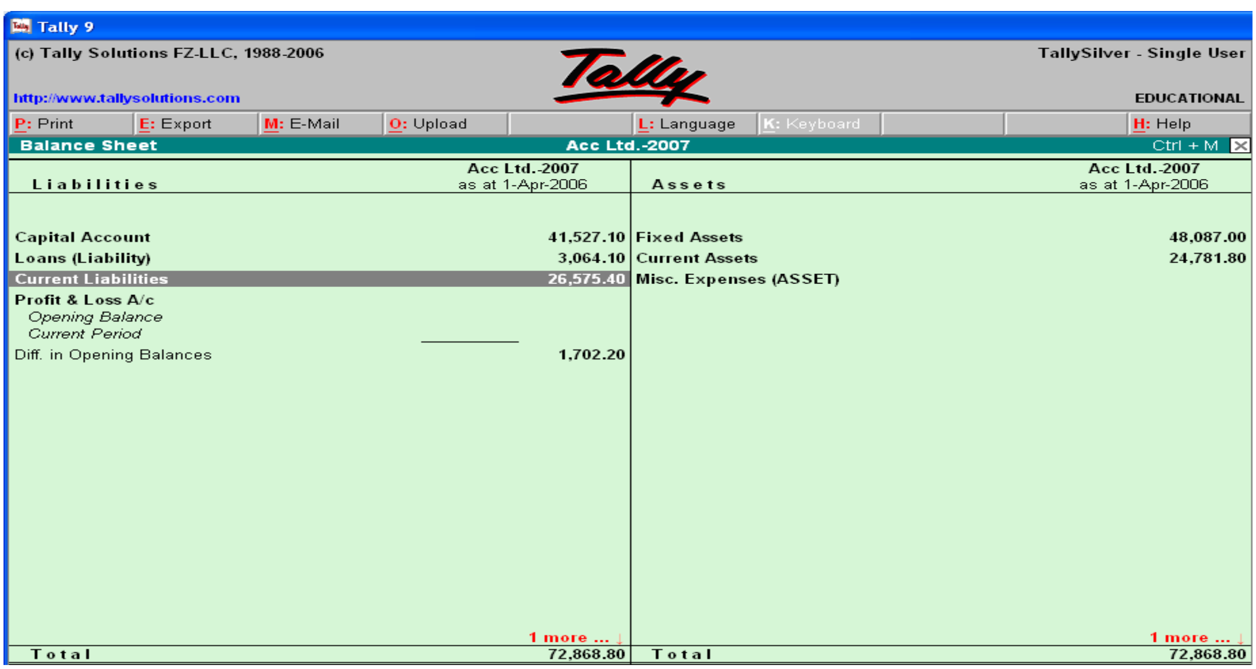
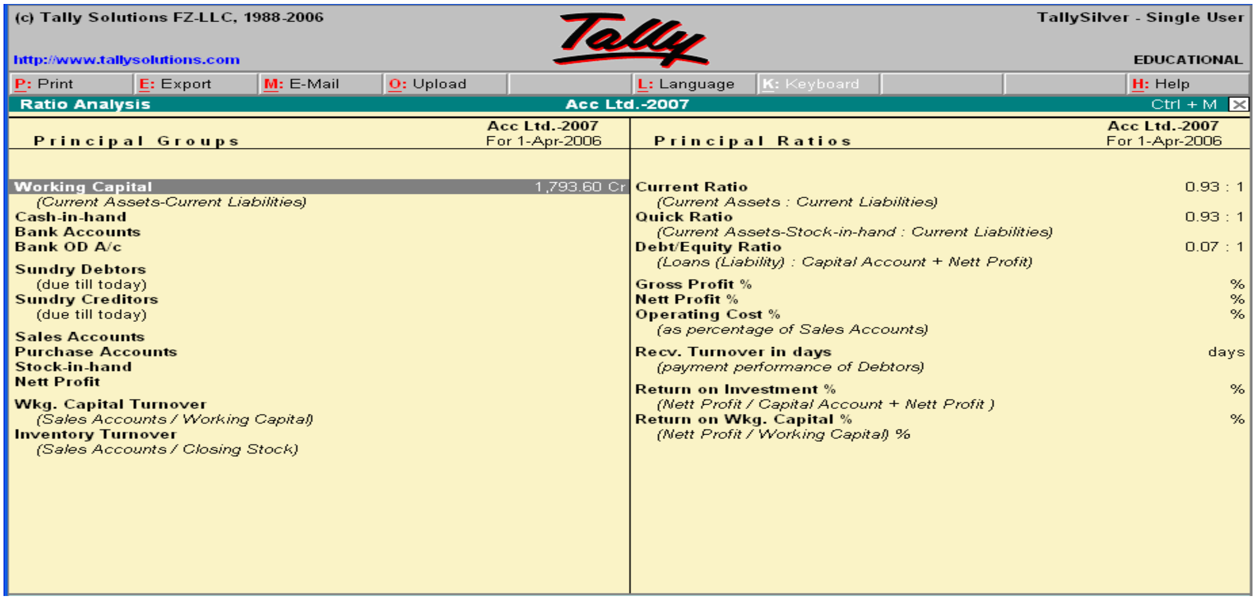


Fig. 4.20: Preparation of Balance Sheet of ACC Ltd. for 2007



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http://www.tallysolutions.com | EDUCATIONAL
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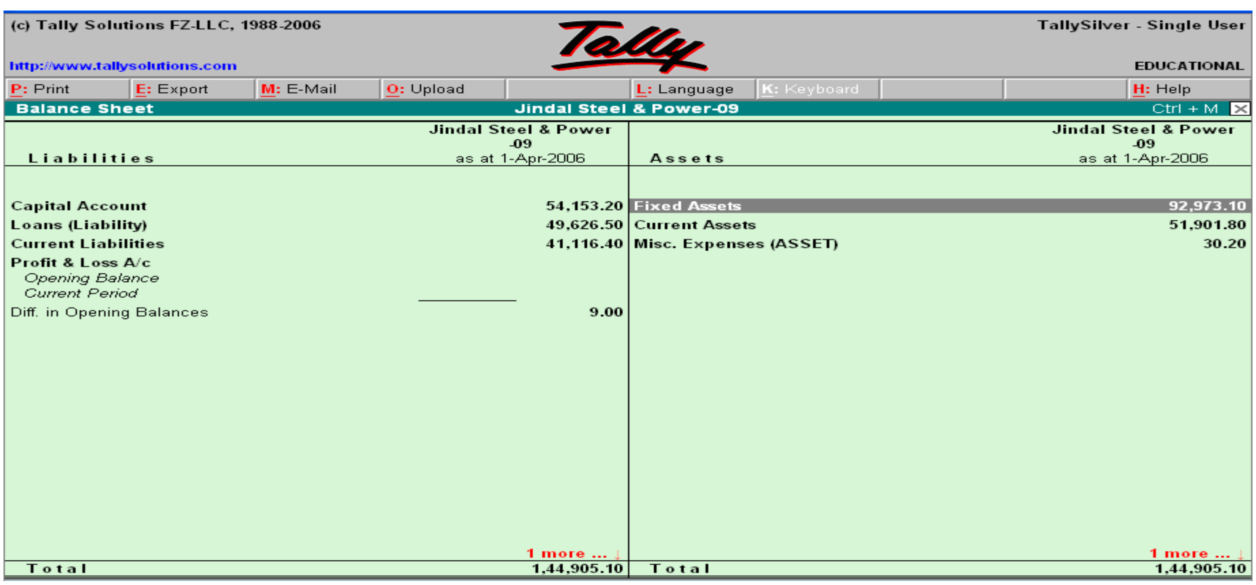
Ratio Analysis | Acc Ltd.-2007 | Ctrl + M

Principal Groups	Acc Ltd.-2007 For 1-Apr-2006	Principal Ratios	Acc Ltd.-2007 For 1-Apr-2006
Working Capital	1,793.60 Cr	**Current Ratio**	0.93 : 1
(Current Assets-Current Liabilities)		*(Current Assets : Current Liabilities)*	
Cash-in-hand		**Quick Ratio**	0.93 : 1
Bank Accounts		*(Current Assets-Stock-in-hand : Current Liabilities)*	
Bank OD A/c		**Debt/Equity Ratio**	0.07 : 1
		(Loans (Liability) : Capital Account + Nett Profit)	
Sundry Debtors		**Gross Profit %**	%
(due till today)		**Nett Profit %**	%
Sundry Creditors		**Operating Cost %**	%
(due till today)		*(as percentage of Sales Accounts)*	
Sales Accounts		**Recv. Turnover in days**	days
Purchase Accounts		*(payment performance of Debtors)*	
Stock-in-hand			
Nett Profit		**Return on Investment %**	%
Wkg. Capital Turnover		*(Nett Profit / Capital Account + Nett Profit)*	
(Sales Accounts / Working Capital)		**Return on Wkg. Capital %**	%
Inventory Turnover		*(Nett Profit / Working Capital) %*	
(Sales Accounts / Closing Stock)			

Fig. 4.21: Ratio Analysis of ACC Ltd. For 2007

4.3.2 Jindal Steel & Power

4.3.2.1 Balance Sheet and Ratio Analysis For 2009



(c) Tally Solutions FZ-LLC, 1988-2006 | Tally | TallySilver - Single User
http://www.tallysolutions.com | EDUCATIONAL
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Balance Sheet | Jindal Steel & Power-09 | Ctrl + M

Liabilities	Jindal Steel & Power -09 as at 1-Apr-2006	Assets	Jindal Steel & Power -09 as at 1-Apr-2006
Capital Account	**54,153.20**	**Fixed Assets**	**92,973.10**
Loans (Liability)	**49,626.50**	**Current Assets**	**51,901.80**
Current Liabilities	**41,116.40**	**Misc. Expenses (ASSET)**	**30.20**
Profit & Loss A/c			
Opening Balance			
Current Period			
Diff. in Opening Balances	**9.00**		
	1 more ...		1 more ...
Total	**1,44,905.10**	**Total**	**1,44,905.10**

Fig. 4.22: Preparation of Balance Sheet of JSPL for 2009

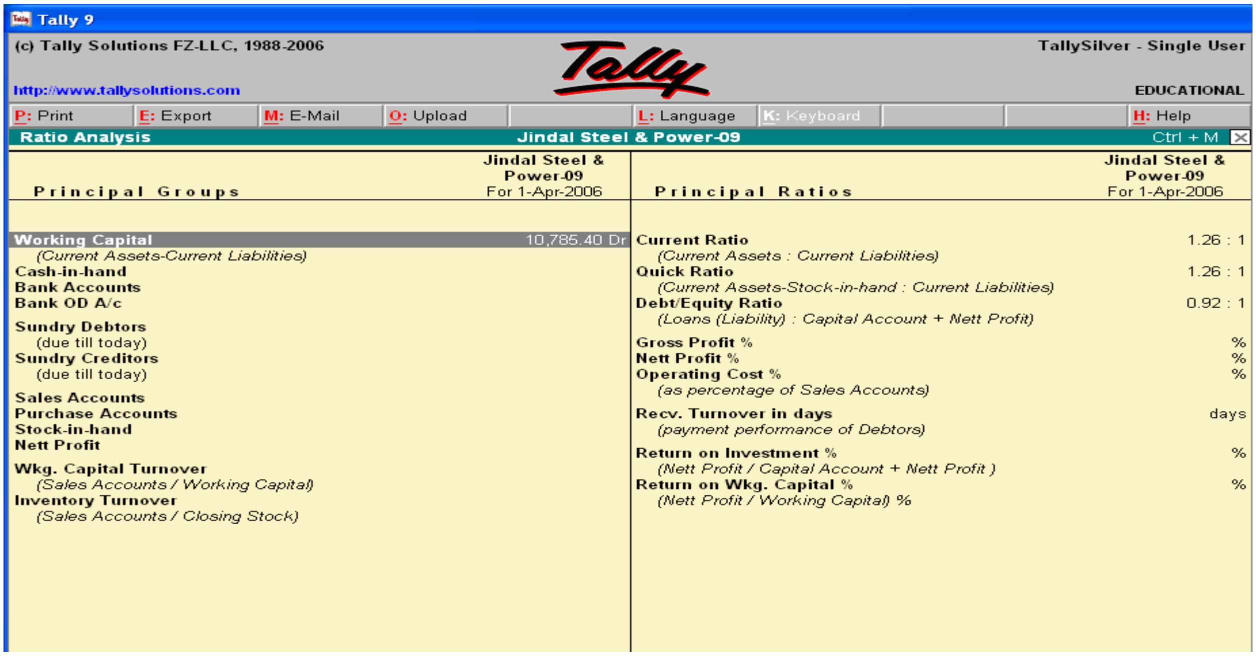

Fig. 4.23: Ratio Analysis of JSPL For 2009

4.3.2.2 Balance Sheet and Ratio Analysis For 2008

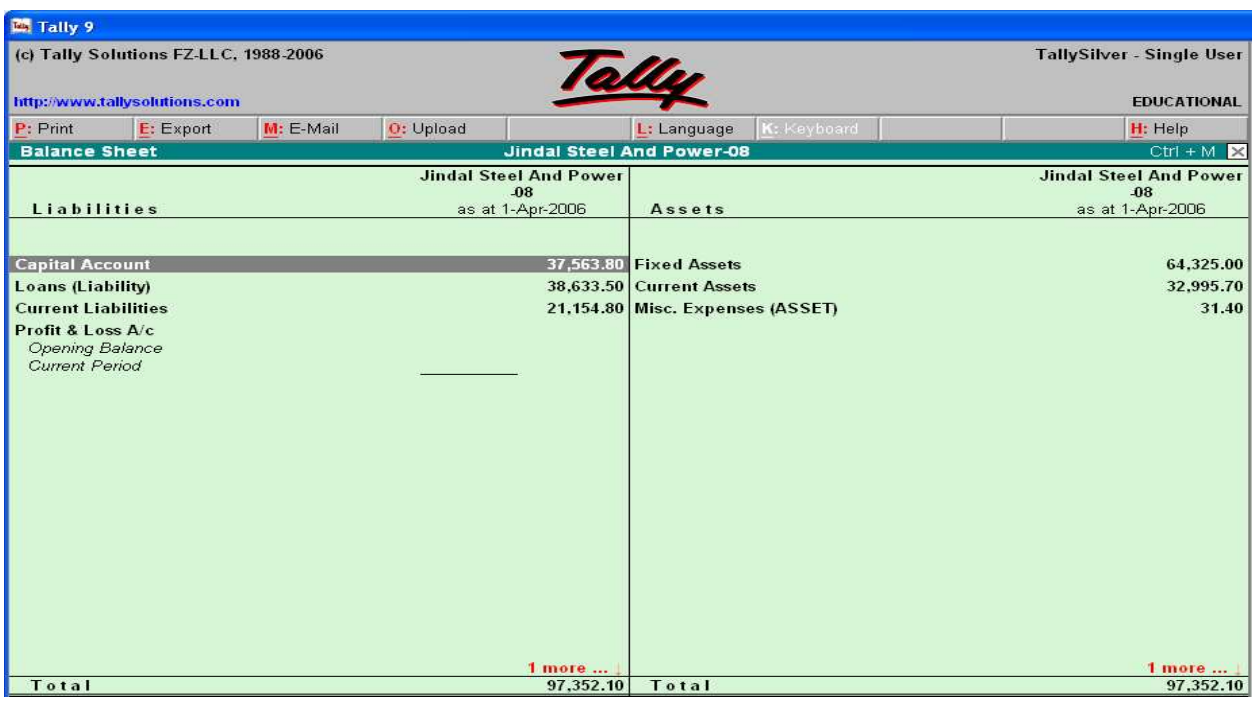

Fig. 4.24: Preparation of Balance Sheet of JSPL for 2008

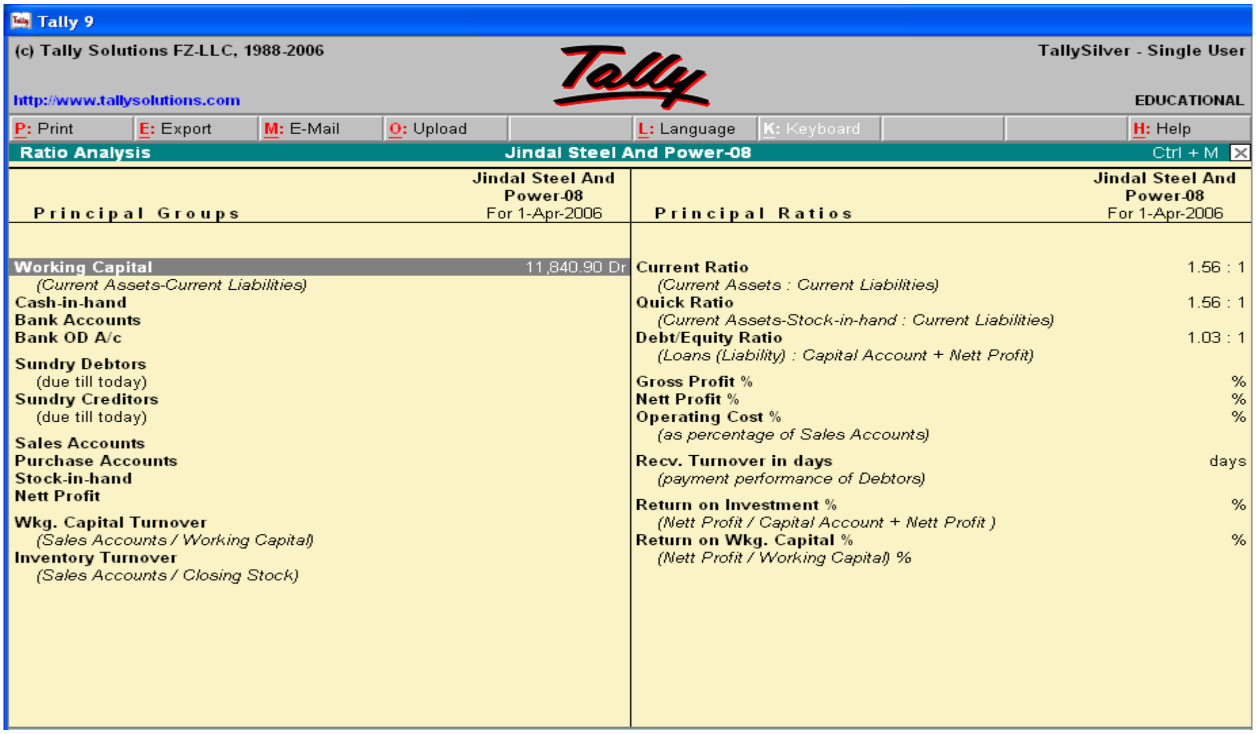

Fig. 4.25: Ratio Analysis of JSPL For 2008

4.3.2.3 Balance Sheet and Ratio Analysis For 2007

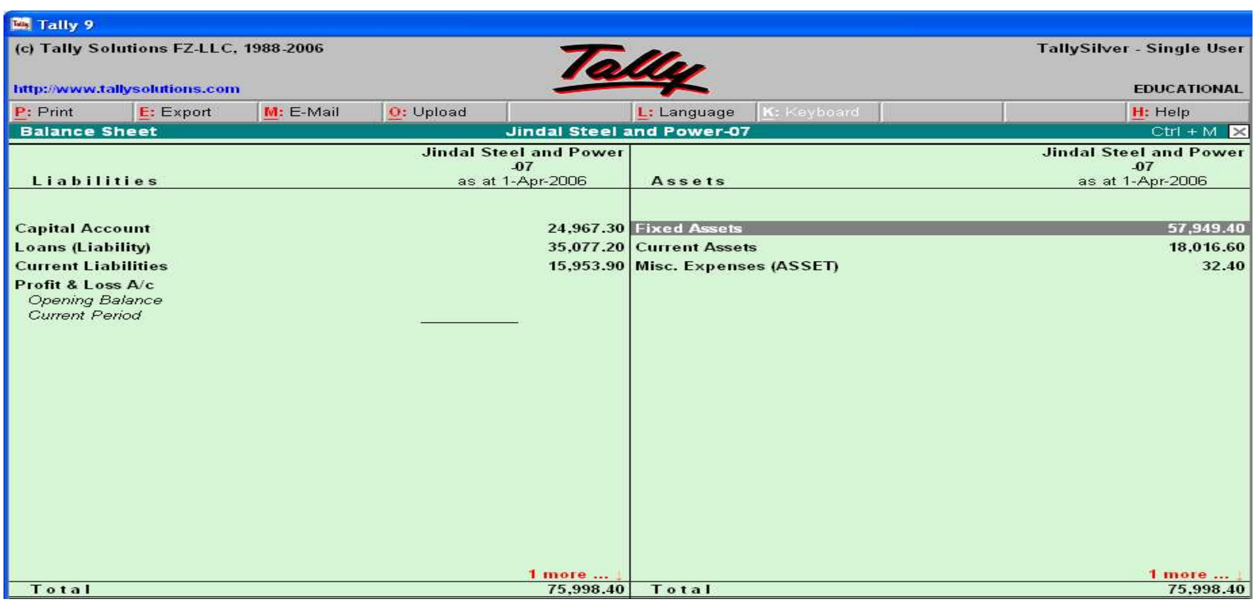

Fig. 4.26: Preparation of Balance Sheet of JSPL for 2007

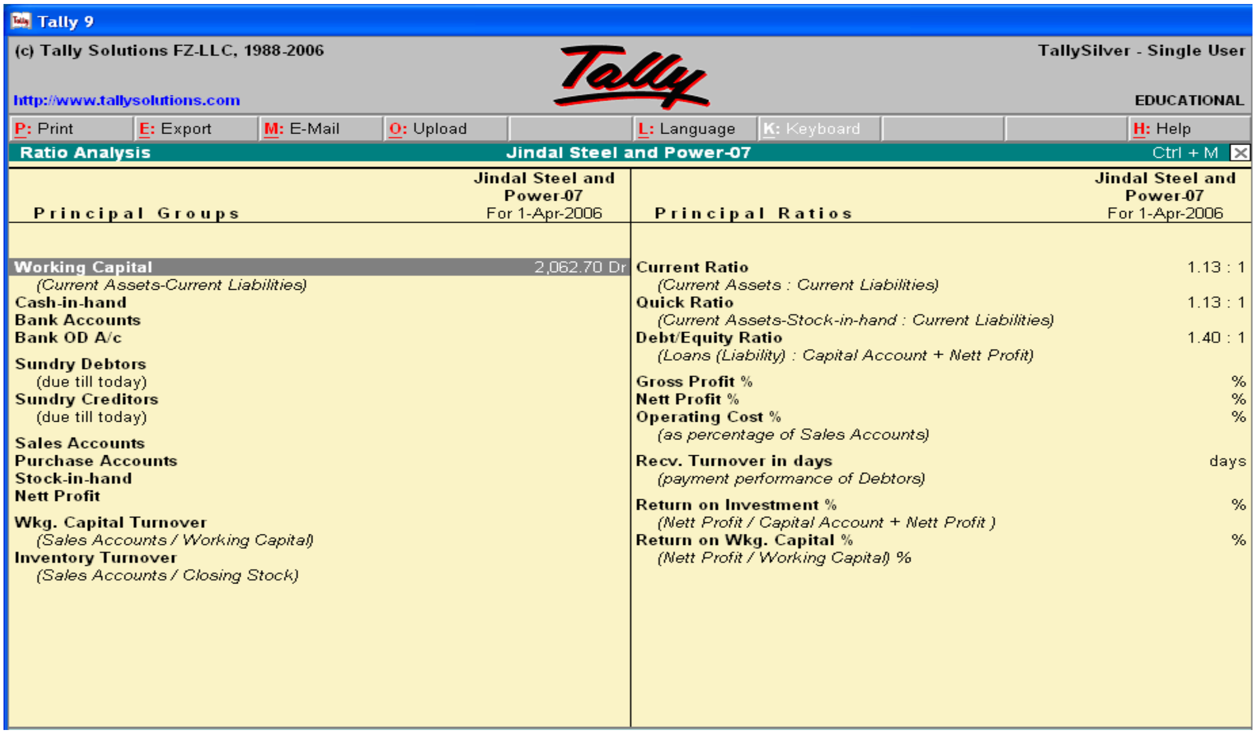

Fig. 4.27: Ratio Analysis of JSPL For 2007

4.3.3 Tata Steel

4.3.3.1 Balance Sheet and Ratio Analysis For 2009

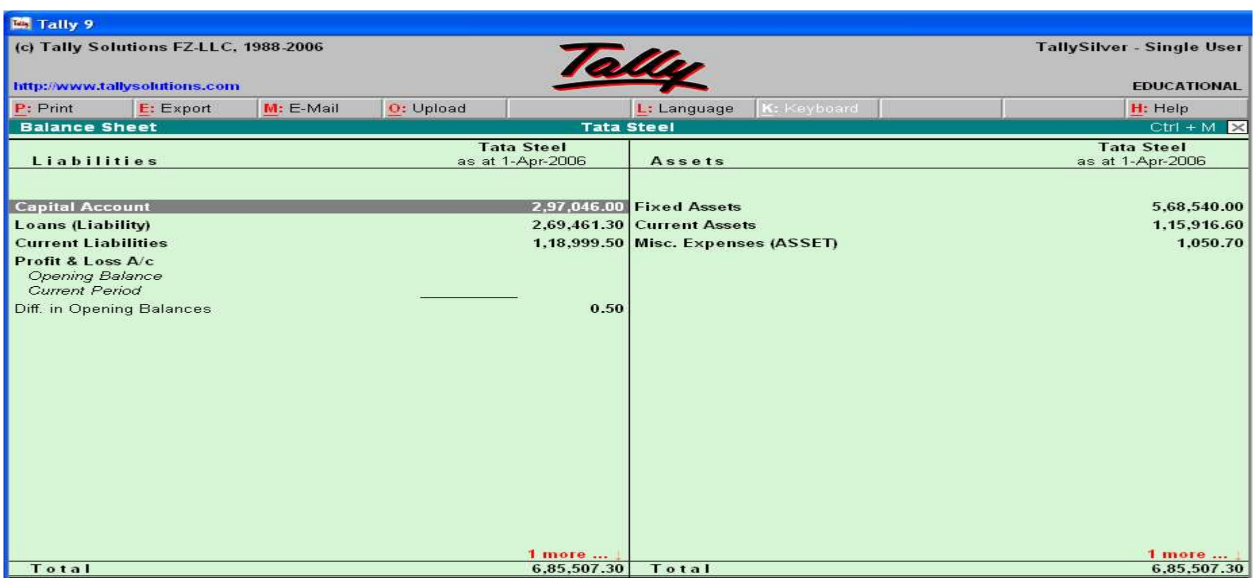

Fig. 4.28: Preparation of Balance Sheet of Tata Steel for 2009

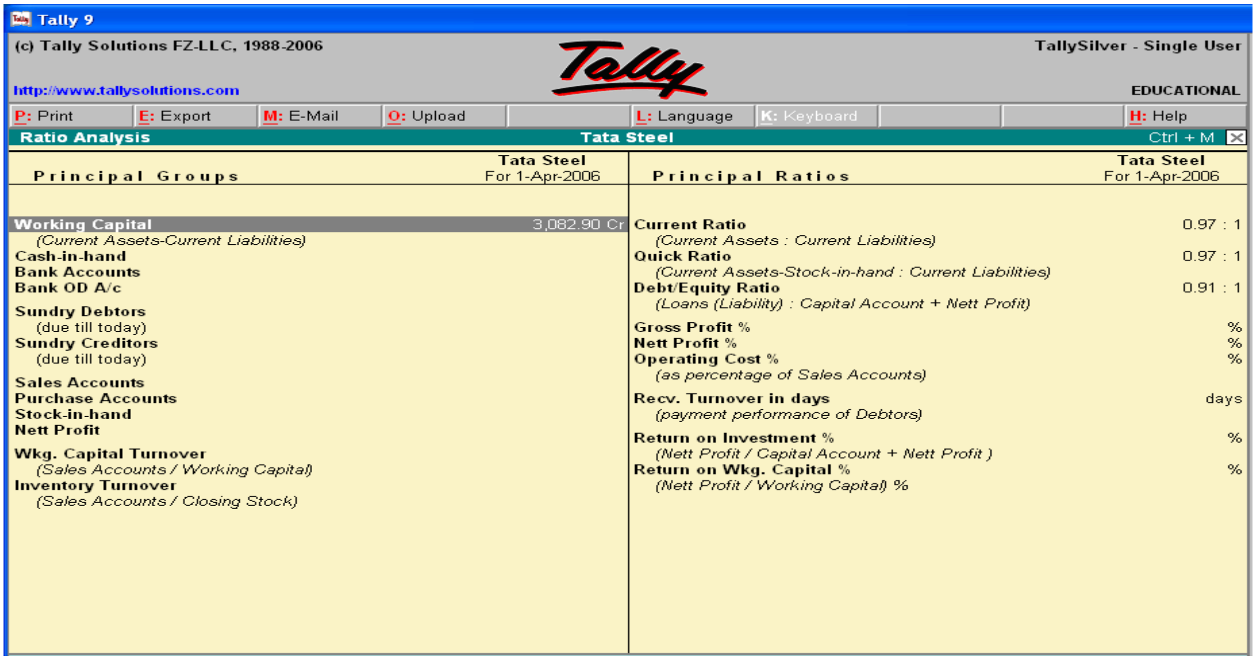

Fig. 4.29: Ratio Analysis of Tata Steel For 2009

4.3.3.2 Balance Sheet and Ratio Analysis For 2008

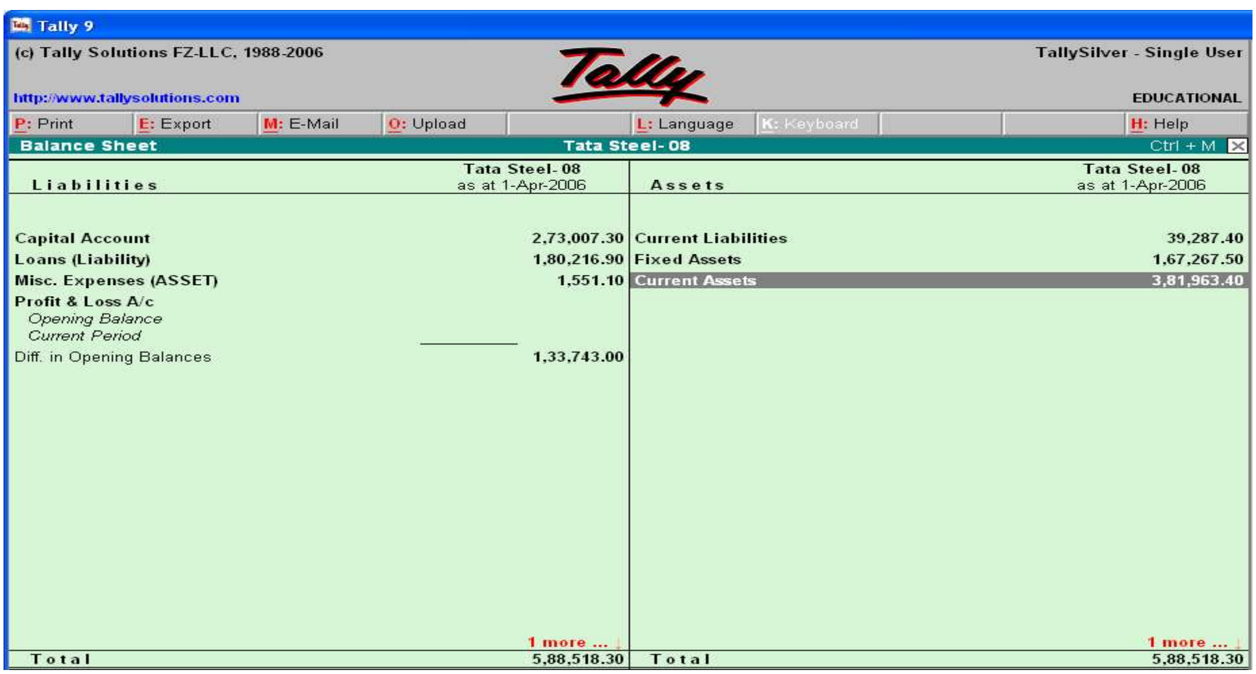

Fig. 4.30: Preparation of Balance Sheet of Tata Steel for 2008

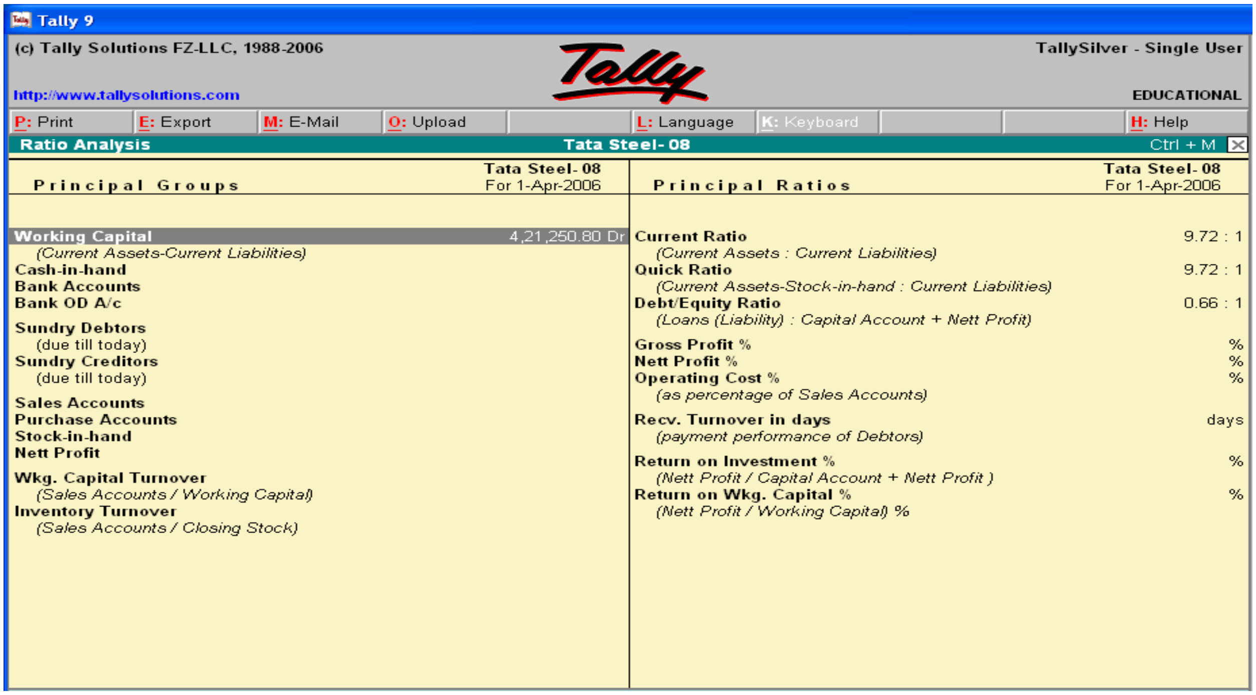

Fig. 4.31: Ratio Analysis of Tata Steel For 2008

4.3.3.3 Balance Sheet and Ratio Analysis For 2007

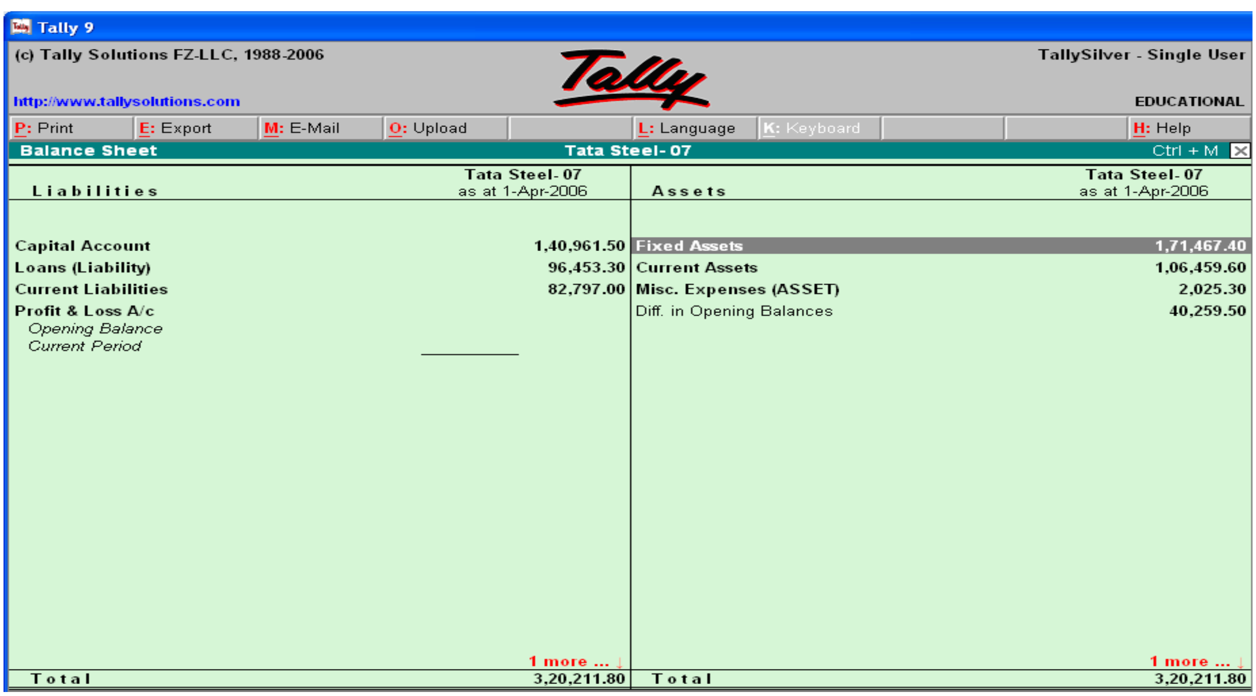

Fig. 4.32: Preparation of Balance Sheet of Tata Steel for 2007

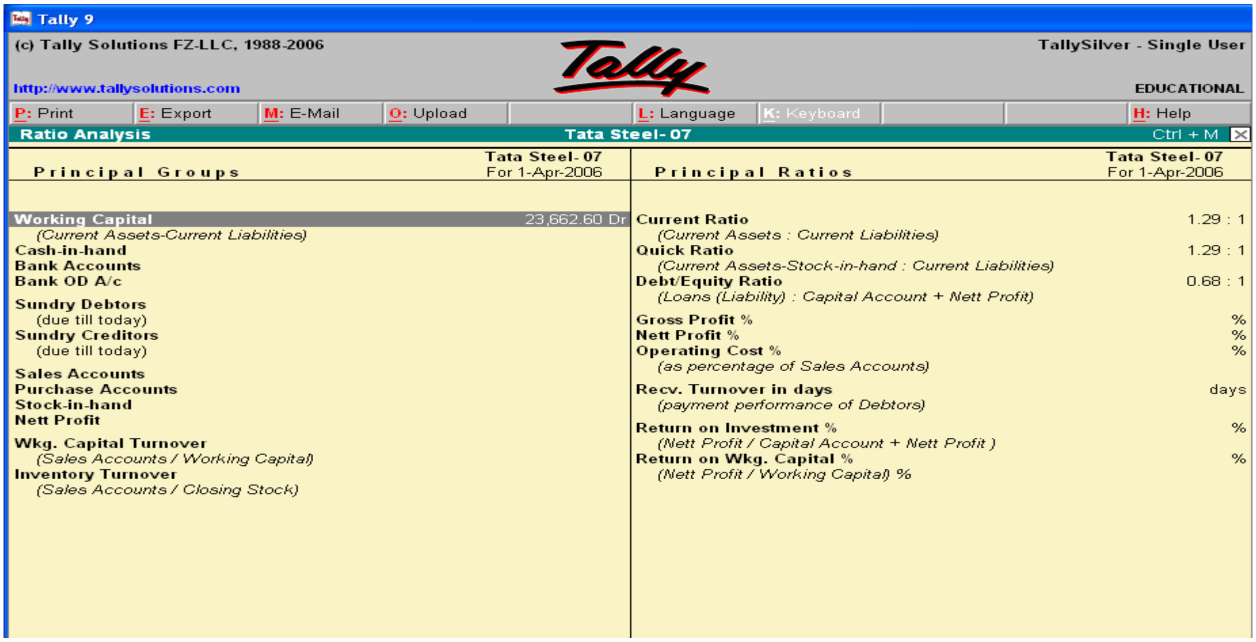

Fig. 4.33: Ratio Analysis of Tata Steel For 2007

4.3.4 Hindustan Zinc Ltd.

4.3.4.1 Balance Sheet and Ratio Analysis For 2009

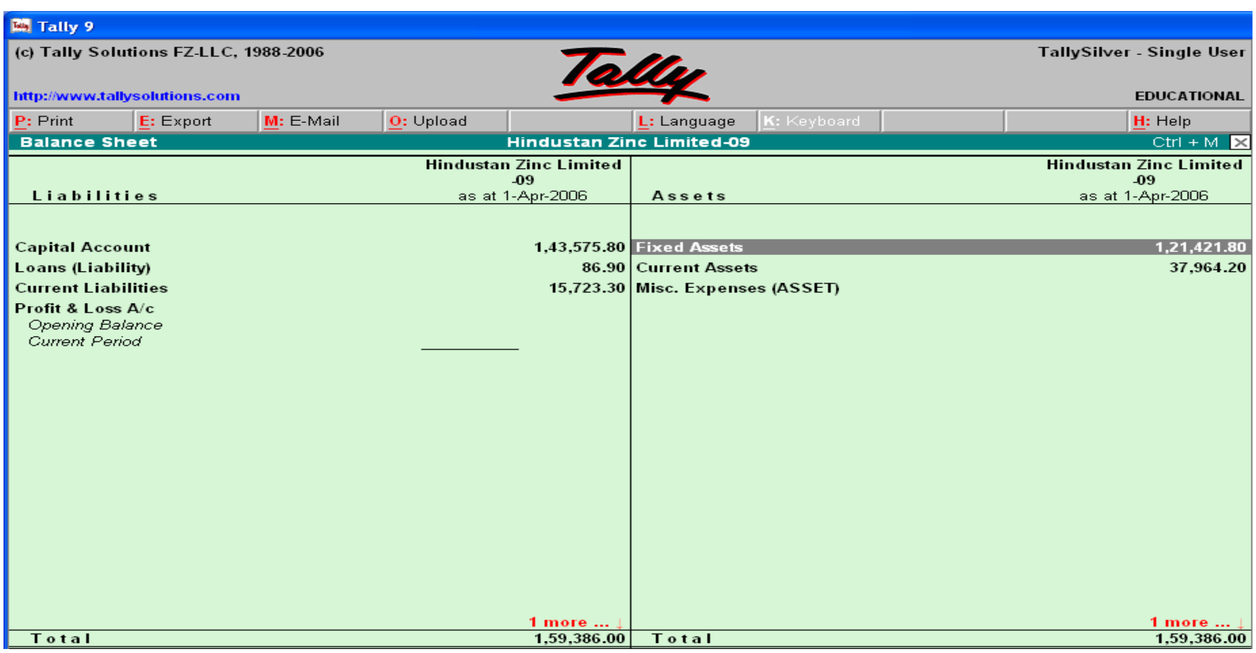

Fig. 4.34: Preparation of Balance Sheet of HZL for 2009

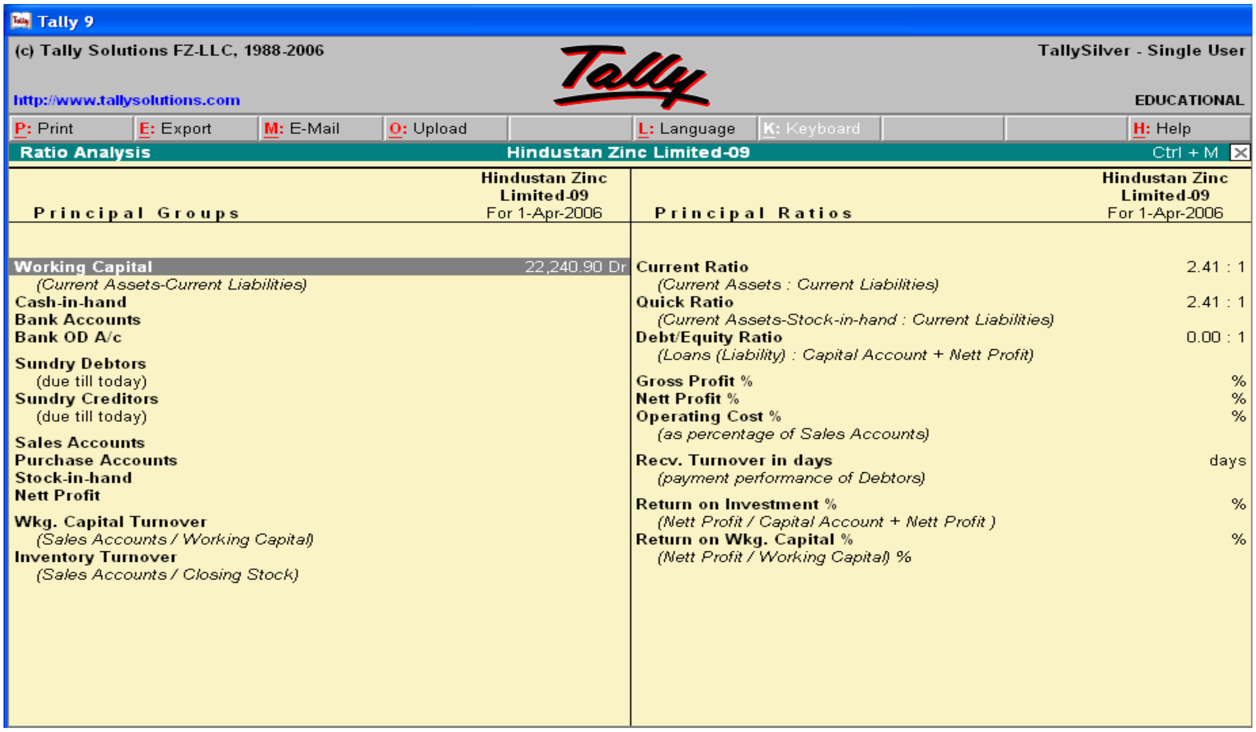

Fig. 4.35: Ratio Analysis of HZL for 2009

4.3.4.2 Balance Sheet and Ratio Analysis For 2008

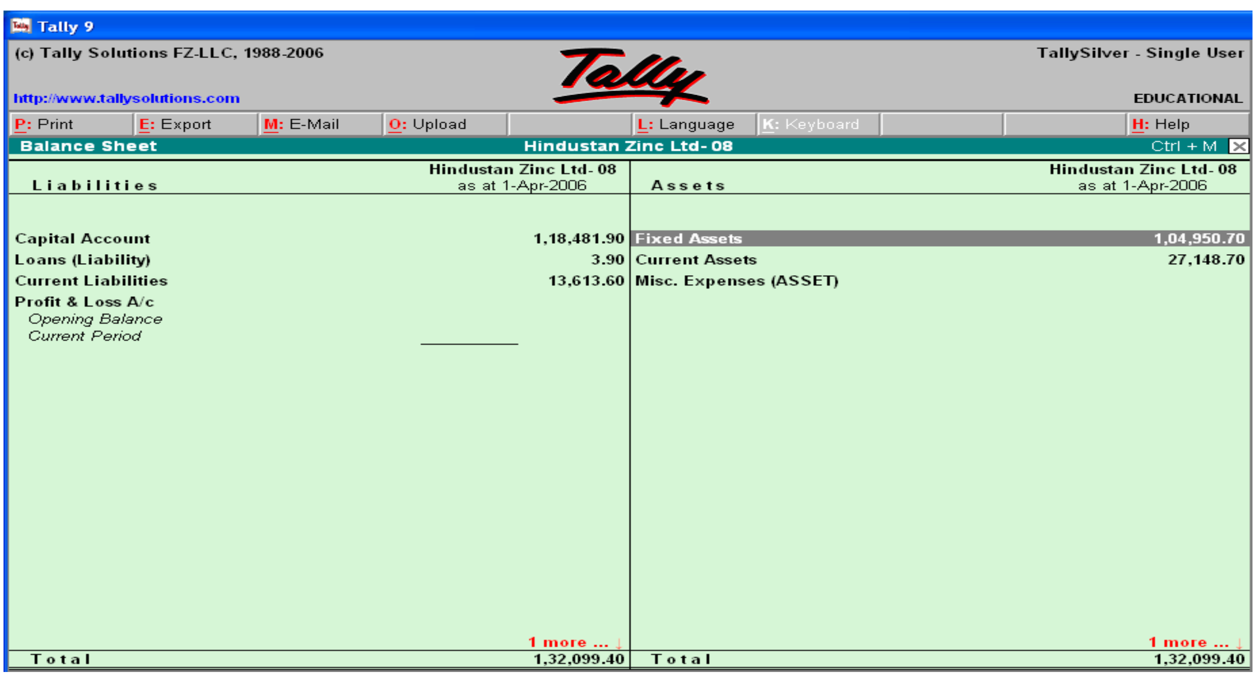

Fig. 4.36: Preparation of Balance Sheet of HZL for 2008

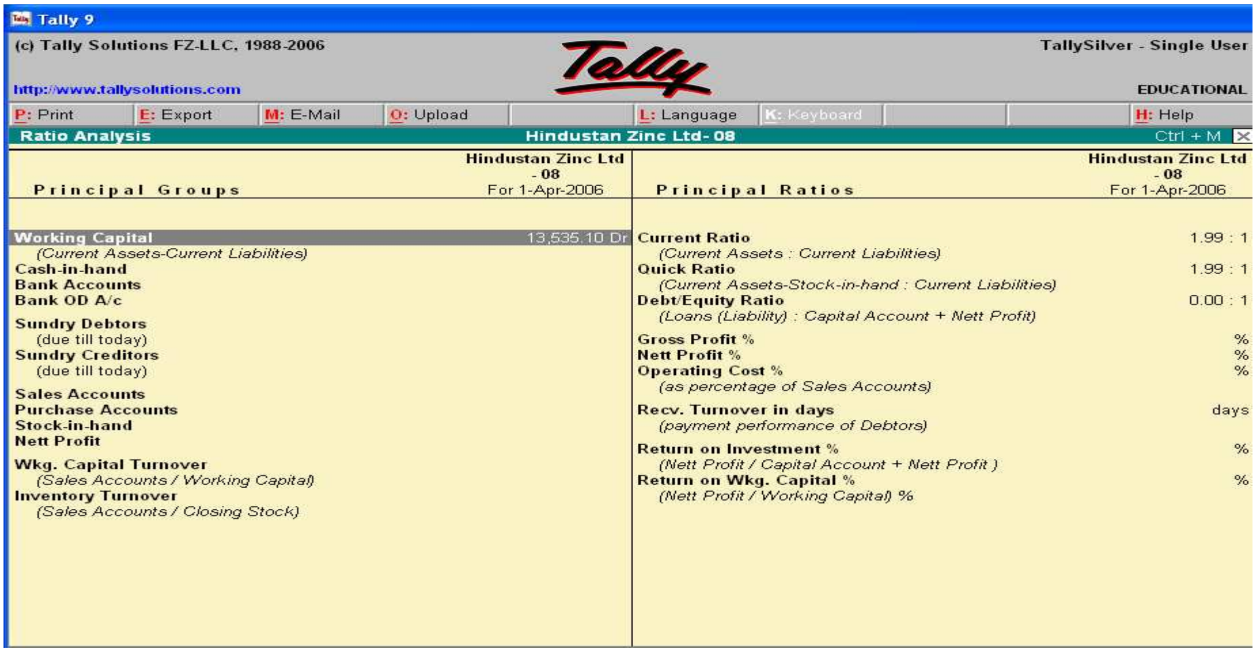

Fig. 4.37: Ratio Analysis of Tata Steel For 2009

4.3.4.3 Balance Sheet and Ratio Analysis For 2007

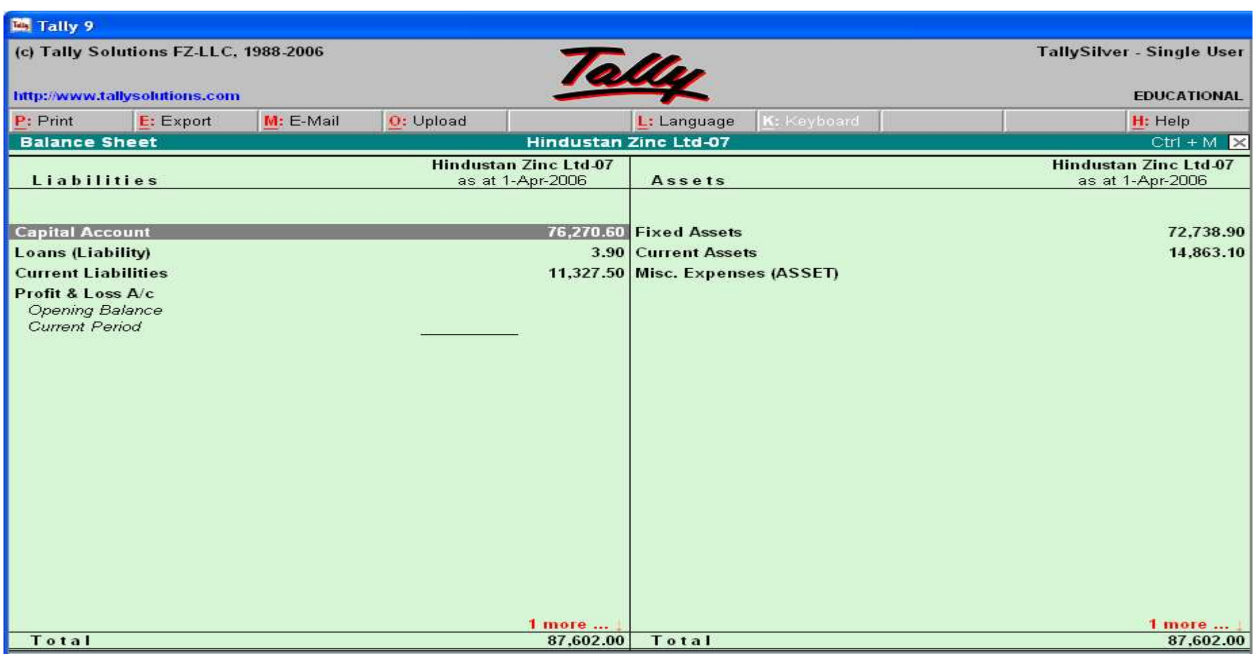

Fig. 4.38: Preparation of Balance Sheet of HZL for 2007

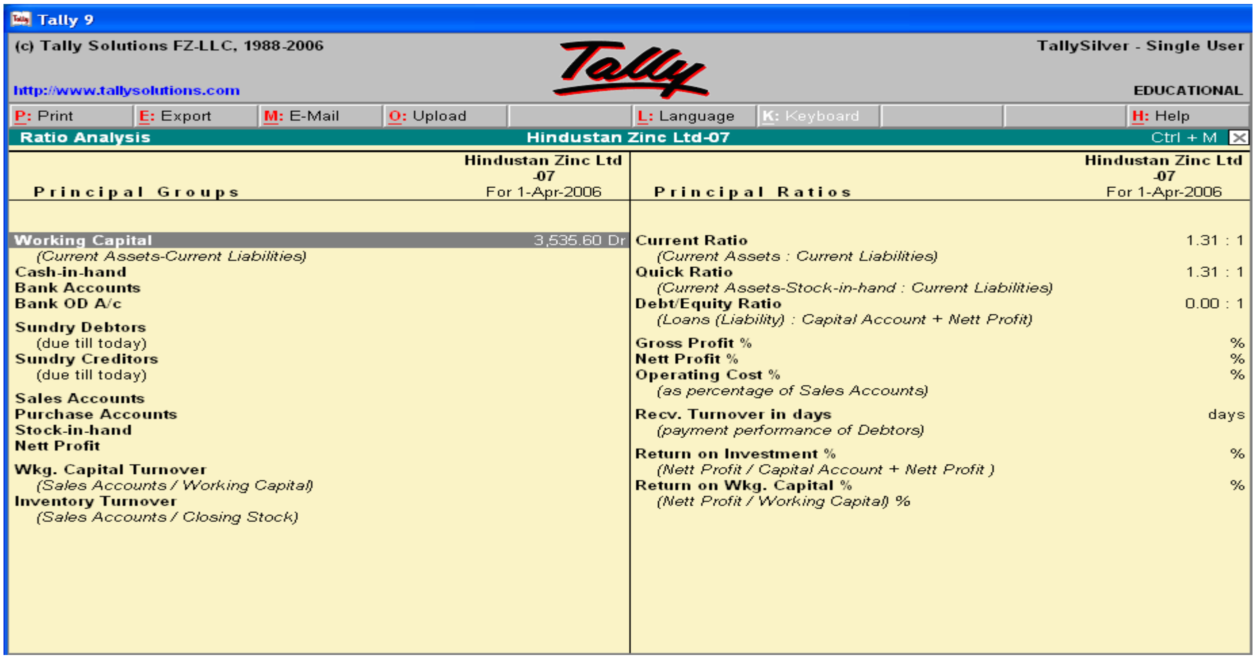

Fig. 4.39: Ratio Analysis of Tata Steel For 2007

4.3.5 Gujarat Mineral Development Corporation

4.3.5.1 Balance Sheet and Ratio Analysis For 2009

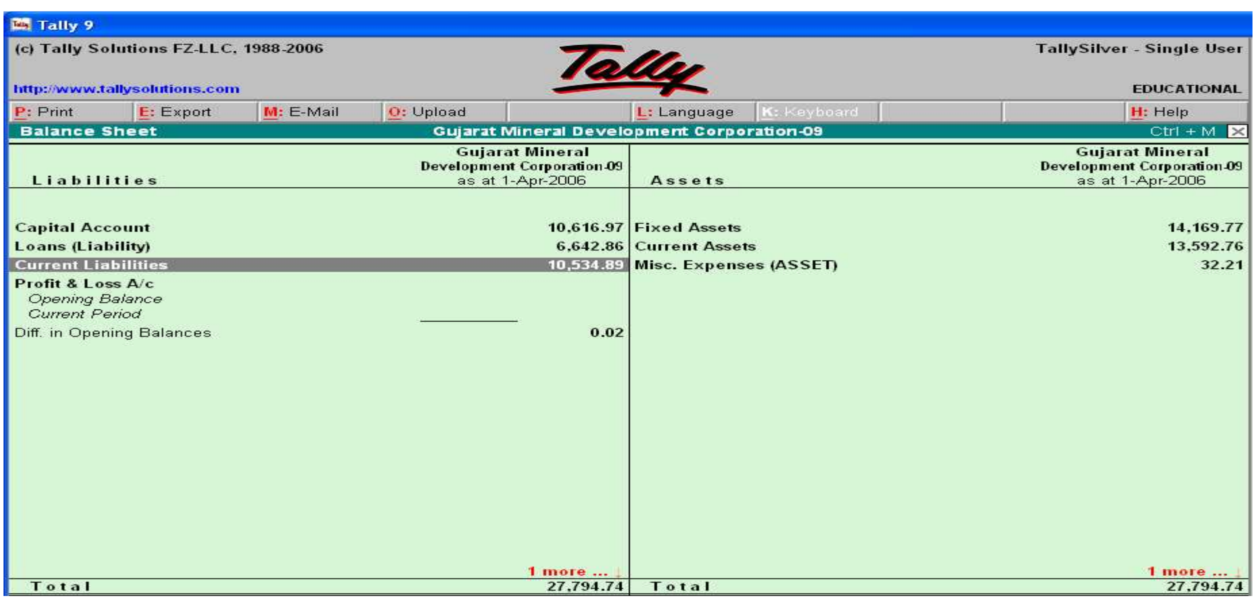

Fig. 4.40: Preparation of Balance Sheet of GMDC for 2009

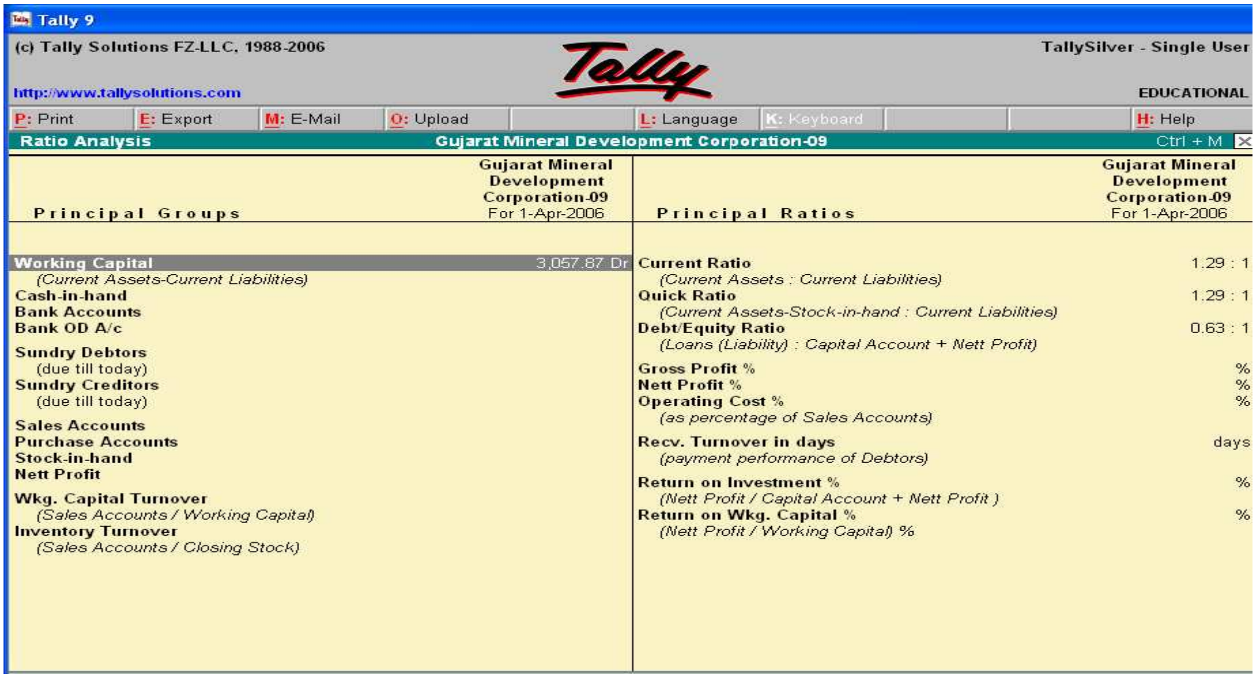

Fig. 4.41: Ratio Analysis of GMDC For 2009

4.3.5.2 Balance Sheet and Ratio Analysis For 2008

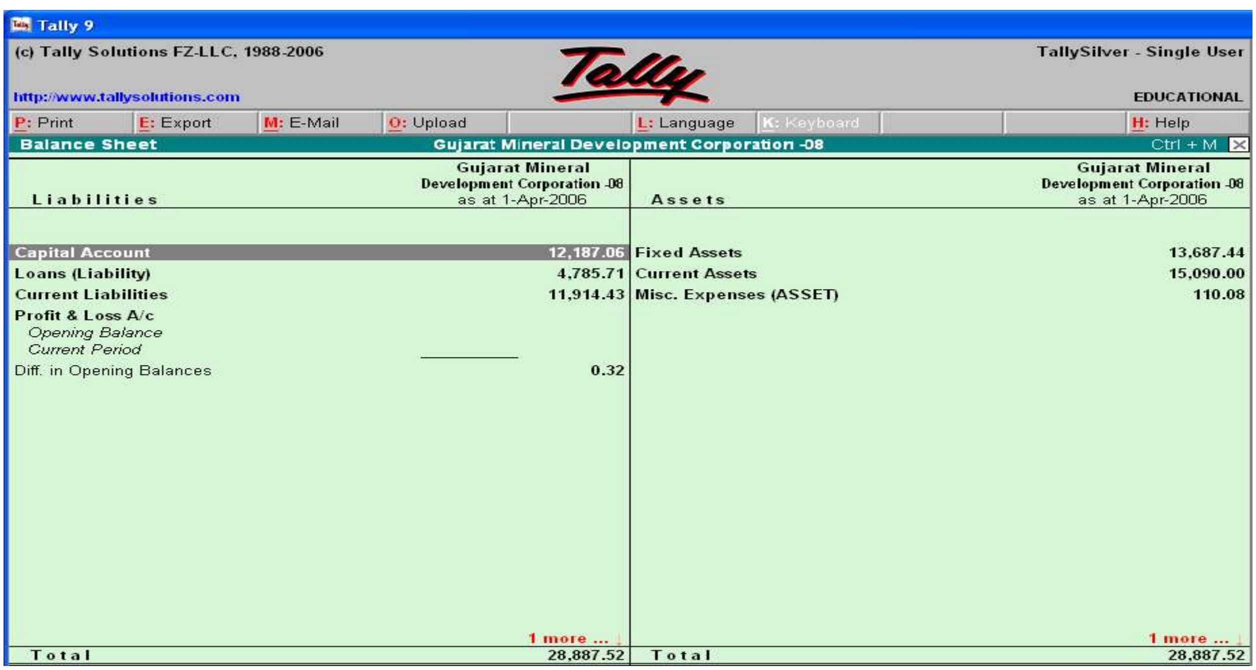

Fig. 4.42: Preparation of Balance Sheet of GMDC for 2008

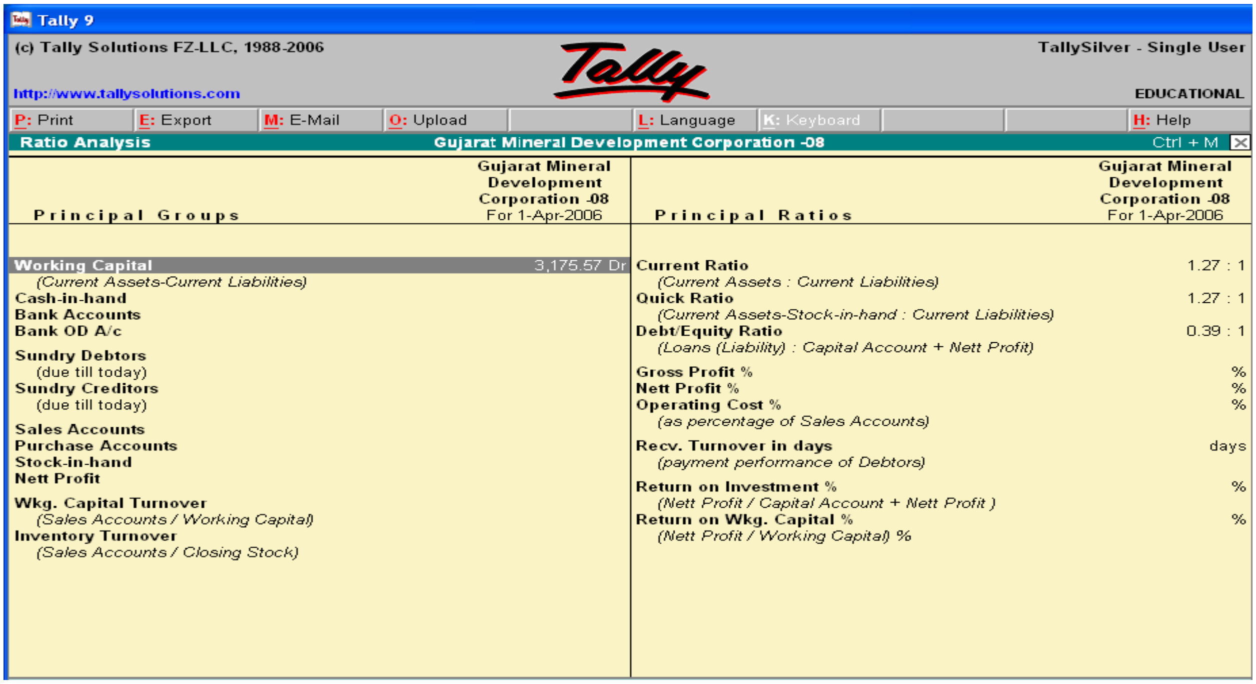

Fig. 4.43: Ratio Analysis of GMDC For 2008

4.3.5.3 Balance Sheet and Ratio Analysis For 2007

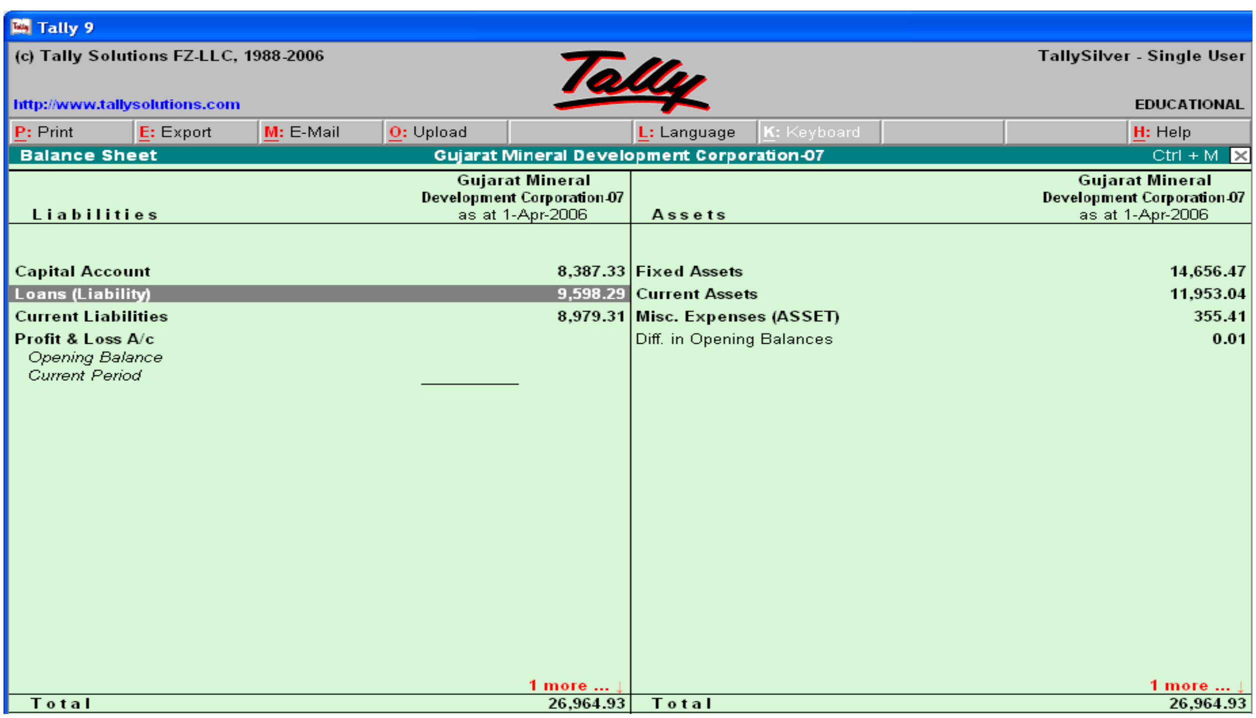

Fig. 4.44: Preparation of Balance Sheet of GMDC for 2007

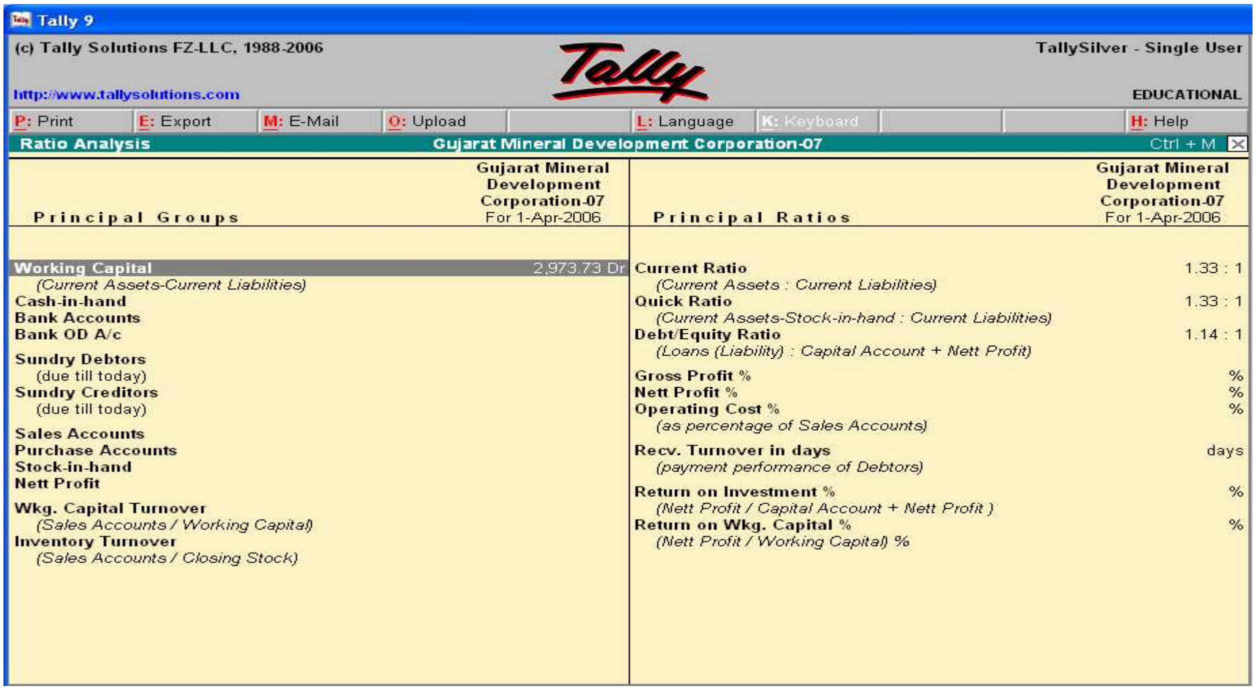

Fig. 4.45: Ratio Analysis of GMDC for 2007

CHAPTER -05

VARIATION OF FINANCIAL RATIOS

The variation of different financial ratios from 2004-09 of all the companies has been shown below:

5.1 ACC Ltd.

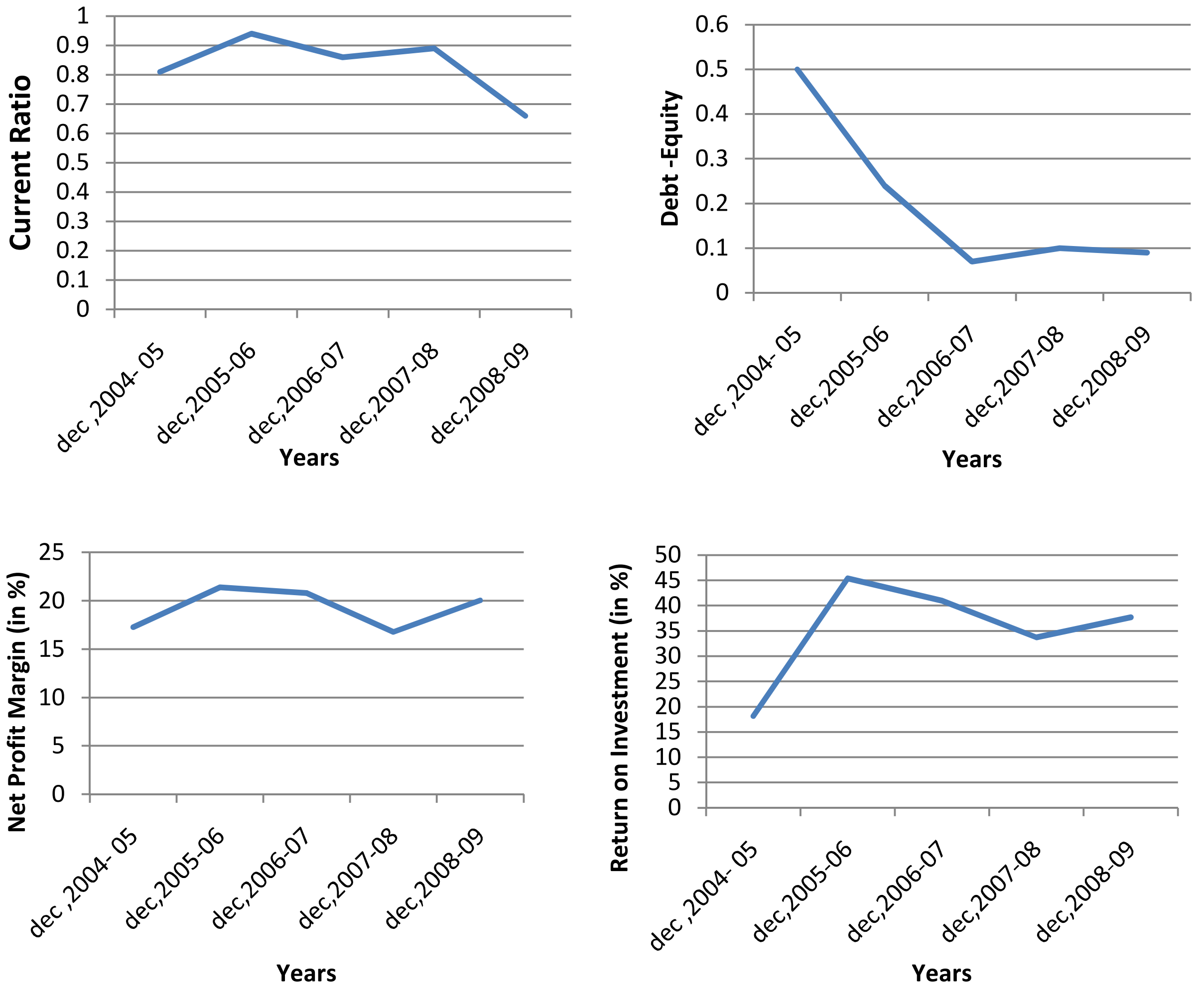

Fig. 5.1: Variation of ratios of ACC Ltd.

5.2 JINDAL STEEL & POWER LTD.

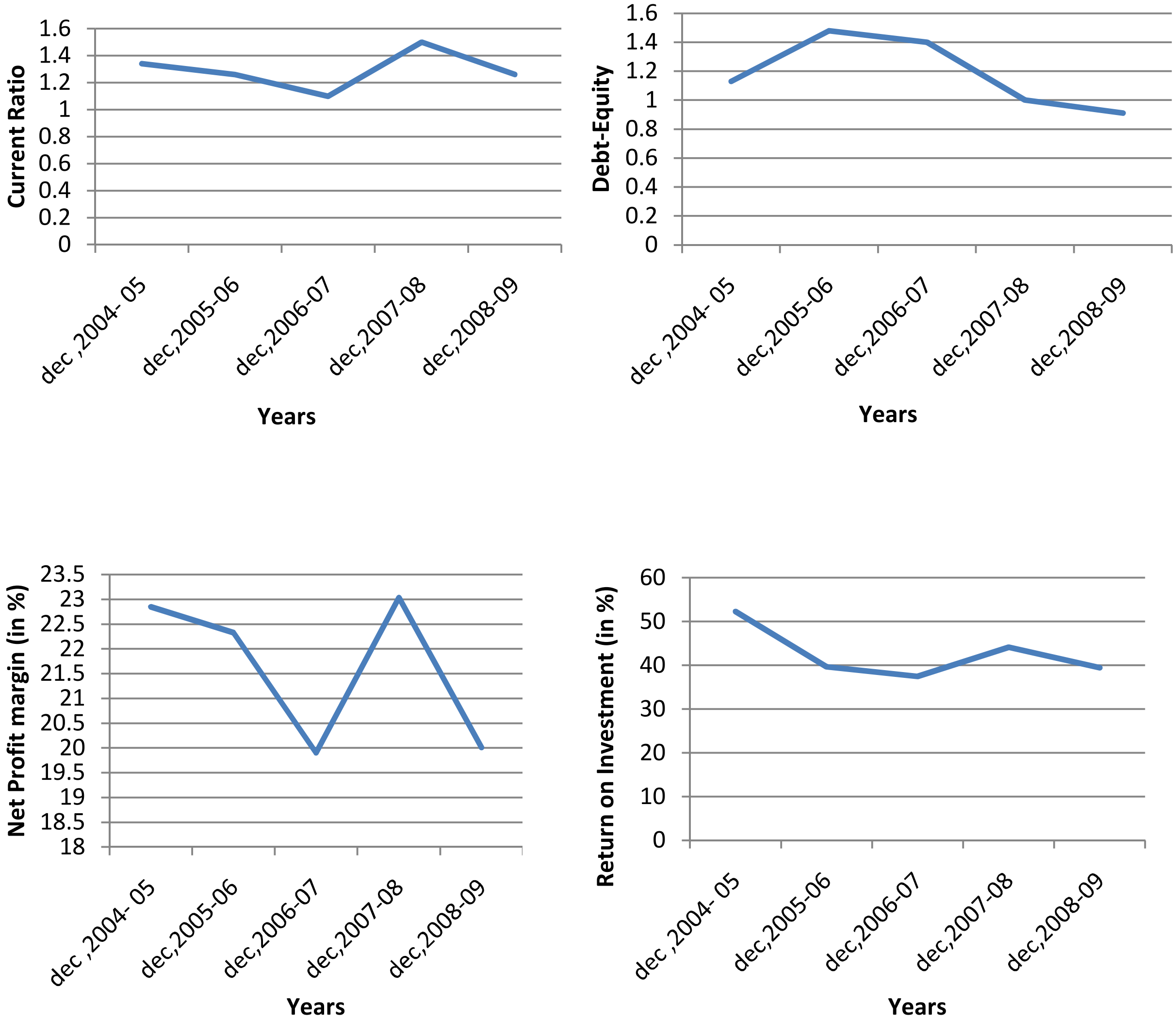

Fig. 5.2: Variation of ratios of Jindal Steel & Power Ltd.

5.3 TATA STEEL

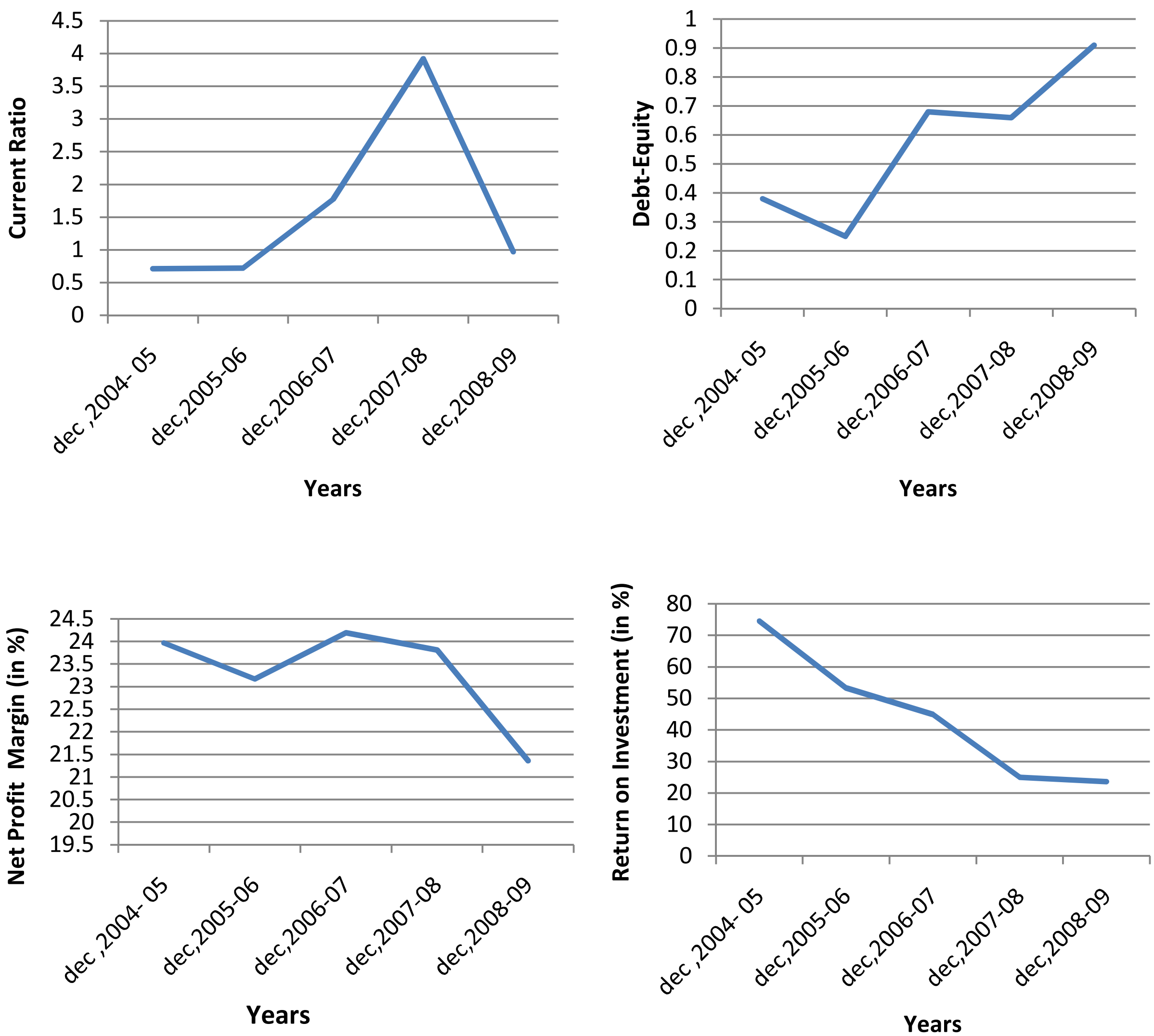

Fig. 5.3: Variation of ratios of Tata Steel

5.4 HINDUSTAN ZINC LIMITED

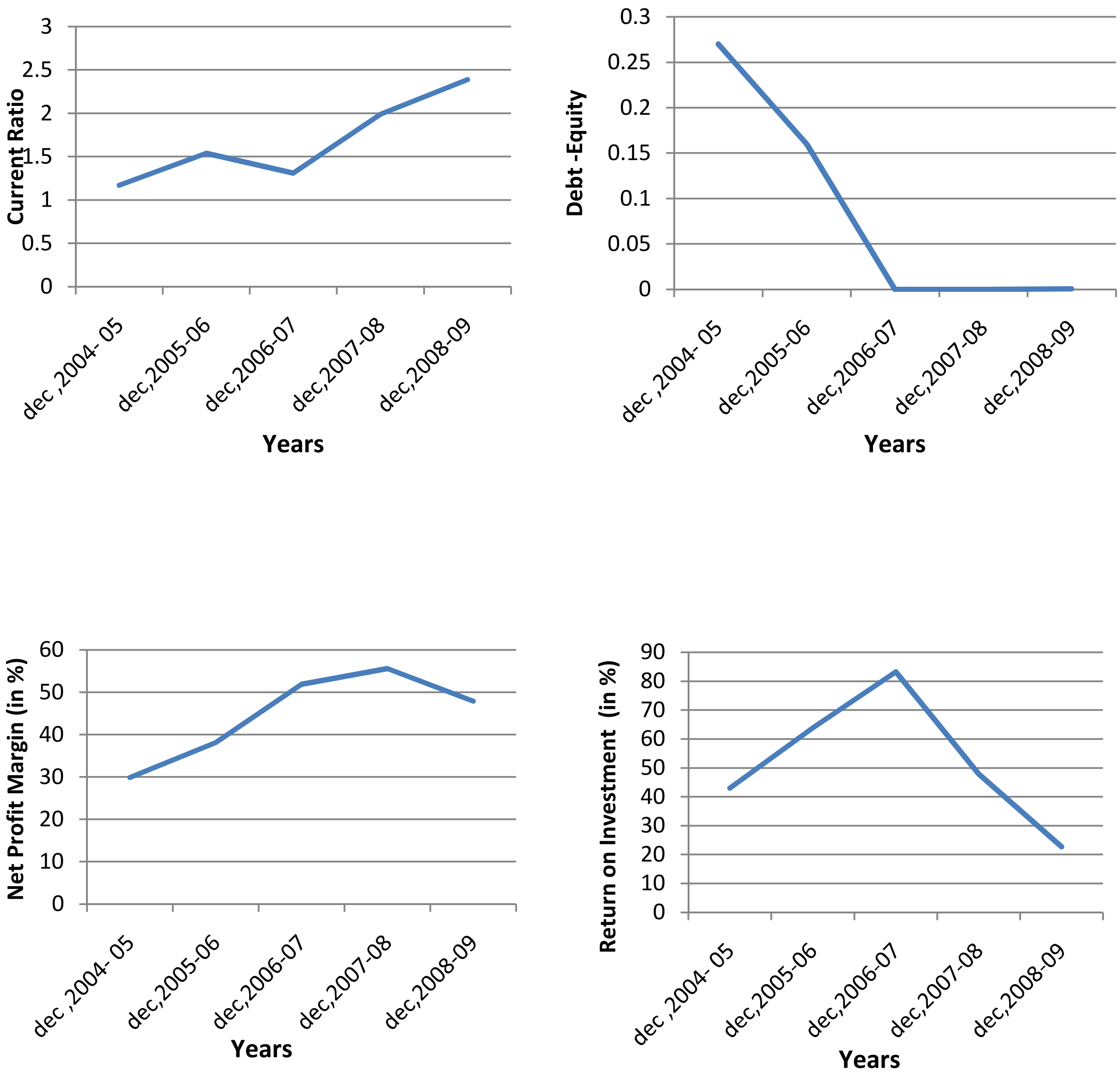

Fig. 5.4: Variation of ratios of HZL

5.5 GUJARAT MINERAL DEVELOPMENT CORPORATION

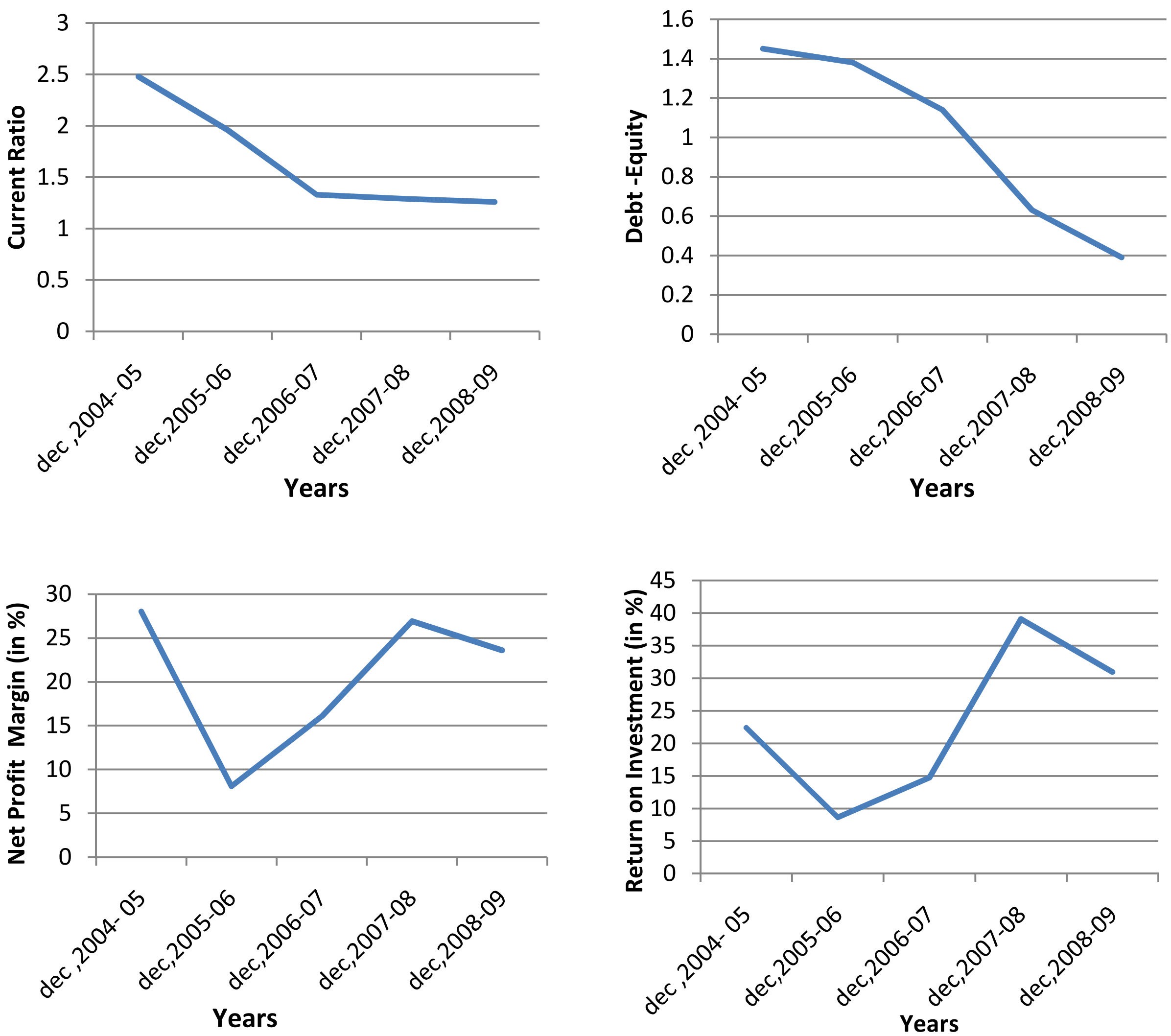

Fig. 5.5: Variation of ratios of GMDC

CHAPTER -06

COMPARISON OF RATIO ANALYSIS OF ALL COMPANIES

Financial ratios of all the companies from 2004-09 has been compared below:

6.1 Comparison of Current ratio of Different Companies from 2004-09

Table 6.1: Comparison of Current ratio

	ACC	JSPL	TATA STEEL	HZL	GMDC	REMARKS
Dec , 2004-05	0.81	1.34	0.71	1.17	2.48	GMDC has a better ratio
Dec , 2005-06	0.94	1.26	0.72	1.54	1.96	GMDC has a better ratio
Dec , 2006-07	0.86	1.1	1.77	1.31	1.33	Tata Steel has a better ratio
Dec , 2007-08	0.89	1.5	3.92	1.99	1.29	HZL has a better ratio
Dec , 2008-09	0.66	1.26	0.97	2.39	1.26	HZL has a better ratio

From the above table, it can be concluded that current ratio of ACC Ltd. was always less than 1 from 2004 -09. Short term liquidity of Jindal Steel & Power Ltd. and HZL was good as current ratio was more than 1. Liquidity position of Tata steel was not satisfactory as the ratio varied from 0.71 to 0.97 in five years. Current ratio of GMDC was more than 1 from 2004-09.

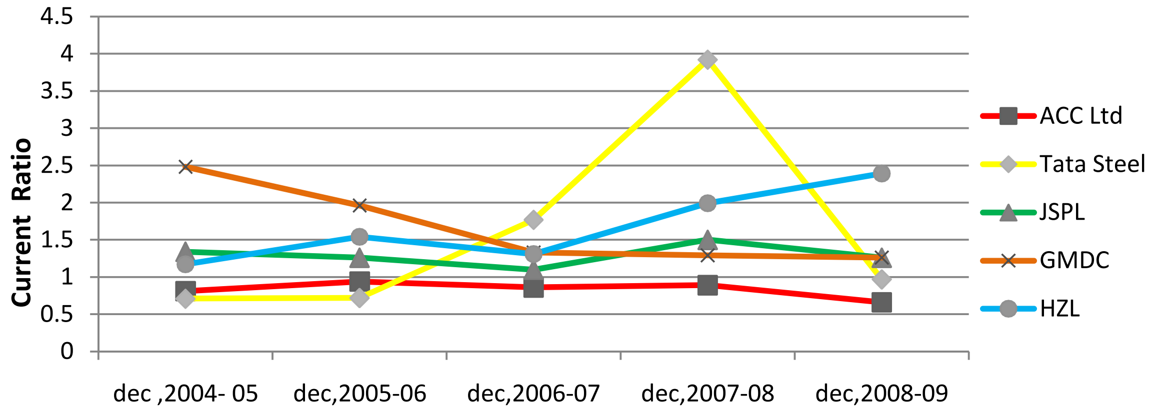

Fig. 6.1: Comparison of Current ratio of all companies

In this graph, Tata steel has the highest current ratio of 3.92 in the year 2007- 08, followed by others. By 2008 -09, the ratio of Tata steel dropped to 0.97, with HZL has the highest ratio of 2.39 and JSPL & GMDC with 1.26. It can also be seen that, in the period of 5 years HZL has improved its liquidity position compared to others, while positions of companies like Tata Steel and GMDC have come down. Current ratio of Tata Steel decreased steeply from 2007 -09 due to its decrease in current assets position.

6.2 Comparison of Debt –Equity ratio Different Companies from 2004-09

Table 6.2: Comparison of Debt –Equity ratio

	ACC	JSPL	TATA STEEL	HZL	GMDC	Remarks
Dec , 2004-05	0.5	1.13	0.38	0.27	1.45	JSPL has a better ratio
Dec , 2005-06	0.24	1.48	0.25	0.16	1.38	GMDC has a better ratio
Dec , 2006-07	0.07	1.4	0.68	0.00005	1.14	GMDC has a better ratio
Dec , 2007-08	0.1	1	0.66	0.000033	0.63	JSPL has a better ratio
Dec , 2008-09	0.09	0.91	0.91	0.0006	0.39	JSPL &Tata Steel has a better ratio

From table 6.2 it can be seen that D-E ratio of ACC Ltd. decreased from 0.5 to 0.07 from 2004 - 07 and then increased to 0.09 in 2009. Debt position of JSPL was satisfactory as the ratio varied from 1.13 to 0.91 from 2004-09. Similarly debt position of GMDC was more than 1 from 2004-07 because of increasing investment and then came down to 0.39. However D-E ratio of Tata Steel & HZL remained less than 1 from 2004-09 as their debts were paid off.

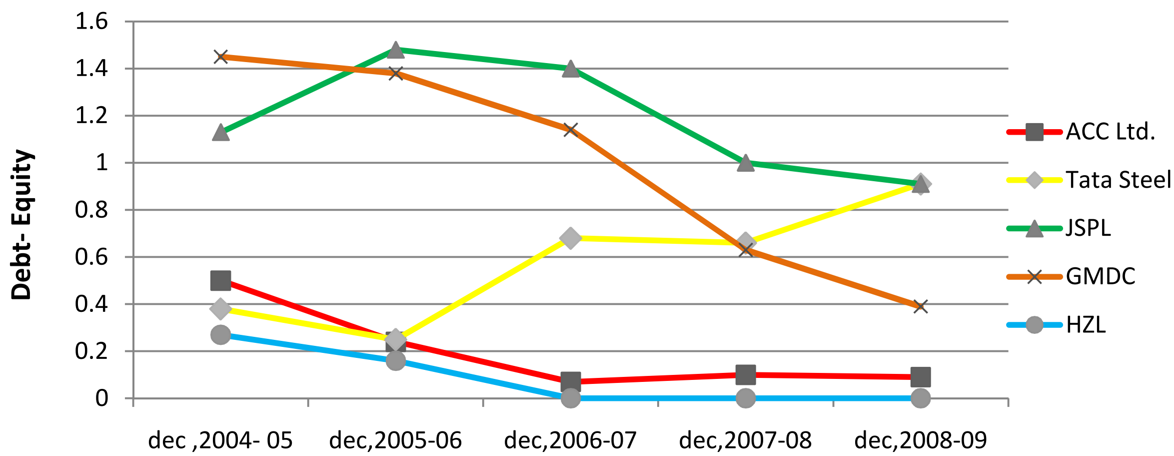

Fig. 6.2: **Comparison of Debt –Equity ratio of all Companies**

From the preceding graph it can be concluded that JSPL has the highest debt- equity ratio of 1.48 and 1.40 from 2005-07 compared to other companies. Tata Steel has improved its ratio from 0.38 to 0.91 in five years. Though owner's share in the company has decreased but more outsiders have started investing in the company and that has lead to desirable ratio. GMDC has performed very badly as the ratio came down from 1.45 to 0.39. This is due to decrease in investment of creditor's. Investment in ACC Ltd. and HZL have also come down in the five years.

6.3 Comparison of Net Profit margin of different companies from 2004-09

Table 6.3: Comparison of Net Profit Margin

	ACC	JSPL	TATA STEEL	HZL	GMDC	REMARKS
Dec , 2004-05	17.28 %	22.88%	23.97%	29.9%	28.04%	HZL has a better net profit margin.
Dec , 2005-06	21.4%	22.33%	23.17%	38.10%	8.1%	HZL has a better net profit margin.
Dec , 2006-07	20.8%	19.9%	24.19%	51.9%	16.07%	HZL has a better net profit margin.
Dec , 2007-08	16.77%	23.04%	23.8%	55.6%	26.9%	HZL has a better net profit margin.
Dec , 2008-09	20.03%	20.01%	21.36%	47.9%	23.6%	HZL has a better net profit margin.

From Table 6.3 it can be seen that HZL has the highest profit margin in all the five years which is because of their increase in sales. Profitability of ACC Ltd. varied marginally from 17% to 20%. Profit Margin of GMDC came down from 28.04 % to 23.6% from 2004-09. Though sales of the company JSPL, Tata Steel and GMDC increased, their profit percentage decreased from 2004-09 due to their decrease in net profit.

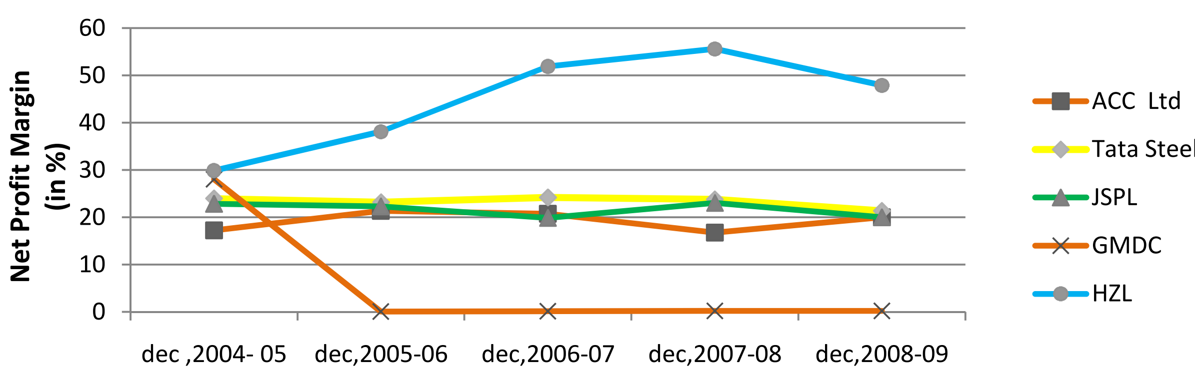

Fig. 6.3: Comparison of Net Profit Margin of all Companies

HZL remained the single most profitable firm in the five years with net profit increasing from 29% in 2004-05 to 47% in 2008-09. Tata Steel and JSPL maintained a constant growth for the period while net profit of GMDC after declining for the first two years increased up to 23 % in the last year. Profit Margin for ACC Ltd. fluctuated during the period from 17 % to 20 %.

6.4 Comparison of ROI of Different Companies from 2004-09

Table 6.4: Comparison of ROI

	ACC	JSPL	Tata Steel	HZL	GMDC	Remarks
Dec , 2004-05	18.16%	52.31%	74.57%	43.04%	22.41%	Tata steel has a better ratio
Dec , 2005-06	45.37%	39.64%	53.28%	63.94%	8.63%	HZL has a better ratio
Dec , 2006-07	41%	37.48%	44.89%	83.30%	14.77%	HZL has a better ratio
Dec , 2007-08	33.70%	44.14%	25.01%	47.91%	39.11%	HZL has a better ratio
Dec , 2008-09	37.7%	39.44%	23.62%	22.69%	30.97%	JSPL has a better ratio

From the above table it can be seen that ROI of ACC Ltd. increased from 18.16% to 37.7% in five years due to substantial increase in its profit before tax. Similarly ROI of GMDC increased marginally from 22.41% to 30.97 %. From 2005- 09 overall profitability of HZL was better than other companies, though its ROI decreased from 43.04 % to 22.69%. ROI of Tata Steel was highest in 2004-05 with 74.57% and then it declined to 23.62%. Similarly ROI of JSPL decreased from 52.31 % to 39.41 % due to significant increase in its expenses.

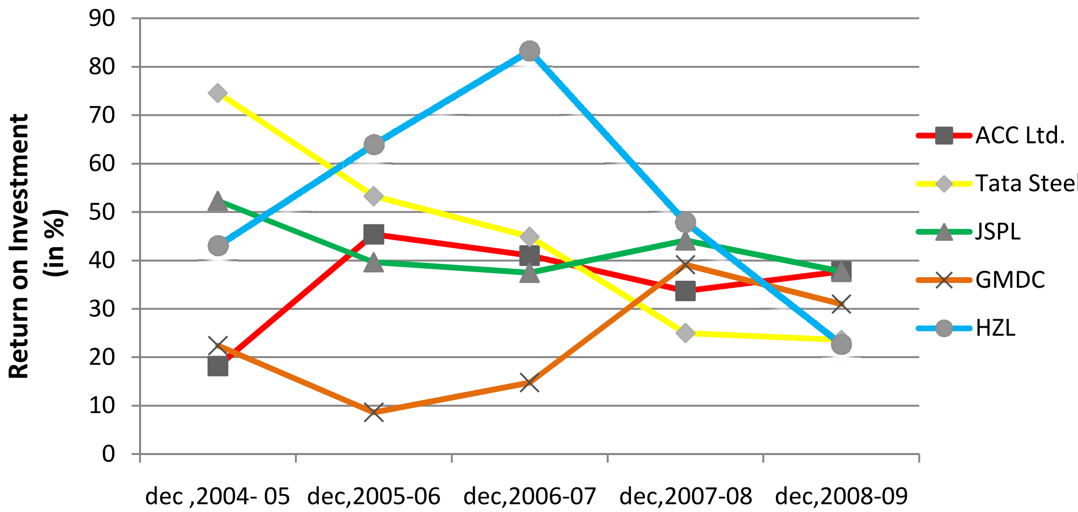

Fig. 6.4: Comparison of ROI of all Companies

From the graph it can be concluded that, overall profitability of GMDC has improved in the last five years from 22.41% in 2004-05 to 30.97% in 2008-09. This is because of their improvement in profit before tax. ROI of Tata Steel declined steeply from 74.57% to 23.62% due to substantial increase in its expenses. Profitability of ACC Ltd. after rising steeply in the first year to 45.37 % came down to 33.70% in the next two years, and then increased marginally to 37.7% the last year. ROI of HZL increased gradually from 43.04 % to 83.30 % and then decreased to 22.69% because of fall in operating profit during the period. ROI of JSPL decreased from 52.31 % in 2004-05 to 39.41 % 2008-09.

CONCLUSION

Analysis and interpretation of financial statements is an important tool in assessing company's performance. It reveals the strengths and weaknesses of a firm. It helps the clients to decide in which firm the risk is less or in which one they should invest so that maximum benefit can be earned. It is known that investing in any company involves a lot of risk. So before putting up money in any company one must have thorough knowledge about its past records and performances**.** Based on the data available the trend of the company can be predicted in near future.

This project mainly focuses on the basics of different types of financial statements. Balance Sheet and Profit & Loss statements of five different coal and non coal mining companies have been studied.

From ratio analysis of Balance Sheet and P & L Statement of ACC Ltd. of 2007-09 it was concluded that liquidity position of the company is not good. Current ratio, debt-equity ratio, quick ratio, net profit margin, operating profit margin, gross profit margin, return on assets, return on investments and return on capital employed were found to be unacceptable.

Short term liquidity position of JSPL in 2007 was good. However, current ratio, quick ratio, net profit margin, return on assets, return on investments and return on capital employed were unsatisfactory. The ratios that are found to be desirable are debt-equity ratio, operating profit margin and gross profit margin.

In 2008-09, net working capital available with the company was adequate. The ratios that were found to be satisfactory are quick ratio, debt-equity ratio, return on investments, return on net worth, operating profit margin and gross profit margin. Current ratio, return on capital employed, return on assets and net profit margin of the company were unacceptable.

For Tata Steel in 2007, net working capital, quick ratio, return on investments, return on net worth, operating profit margin and gross profit margin of the company were satisfactory. However, debt-equity ratio, current ratio, net profit margin, return on capital employed and return on assets were undesirable.

In 2008, only company's current ratio improved due to substantial increase in current assets position. In 2009, net working capital available was inadequate. Company's debt-equity ratio, operating profit margin and gross profit margin were desirable and current ratio, return on investments, return on net worth, return on capital employed and return on assets were found to be unsatisfactory.

Short term liquidity position of HZL was good in 2007. The ratios that were found to be satisfactory are operating profit margin, gross profit margin, net profit margin, return on capital employed, return on assets and return on net worth. Current ratio, quick ratio and debt-equity ratio were undesirable. In 2008, current assets position improved further that resulted in better current ratio and quick ratio. Debt-equity ratio was very low due to less investment. In 2009, return on capital employed, return on assets, return on investment and return on net worth remained unsatisfactory.

For GMDC in 2007, net working capital available was adequate. Quick ratio, debt-equity ratio, operating profit margin and gross profit margin of the company was also desirable. However company's net profit margin, return on capital employed, return on assets, return on investment and return on net worth were undesirable. In 2008 & 2009, only debt-equity ratio of the company decreased as the debts have been cleared.

Three computer programs using turbo C++ were developed for preparation of balance sheet, profit & loss statement and for calculation of different financial ratios. However, only eleven ratios could be calculated with it. In near future the program can be upgraded to calculate more ratios.

Tally 9.0 is used for analyzing the balance sheet and profit & loss statements of a company and calculating the financial ratios. In this project Tally 9.0 is used to prepare the balance sheet and calculate the financial ratios of different companies. Profit & Loss Statements of companies were not calculated as Tally 9.0 has limitations in processing the data that was available. However, only three ratios viz. current ratio, quick ratio and debt-equity ratio were calculated. An advanced version can be developed for calculation of profit & loss statements and other financial ratios.

In this project, comparison of different ratios viz. current ratio, debt-equity ratio, net profit margin and return on investment of all the companies from 2004-09 has been done.

It was observed that current ratio of ACC Ltd. was always less than 1 from 2004 -09 which indicates that liquidity position of the company was not good. Current ratio of Jindal Steel & Power Ltd. and HZL was satisfactory as it remained more than 1 for all the five years. Liquidity position of Tata steel was not satisfactory as the ratio varied marginally from 0.71 to 0.97 in five years whereas current ratio of GMDC decreased from 2.48 to 1.26.

D-E ratio of ACC Ltd. decreased from 0.5 to 0.07 from 2004 -07 and then increased to 0.09 in 2009 which indicates the debts have been cleared. Debt position of JSPL was satisfactory as the ratio varied from 1.13 to 0.91 from 2004-09. GMDC's D-E ratio was 1.45 from 2004-07 because of increasing investment and then came down to 0.39. However D-E ratio of Tata Steel & HZL was less than 1 in five years as their debts were paid off.

From 2004-09, net profit margin of HZL increased from 29.9% to 47.9%. It remained the most profit making company compared to others due to their substantial increase in sales. Profitability of ACC Ltd. varied marginally from 17.28% to 20.03%. Profit Margin of GMDC came down from 28.04% in 2004-05 to 23.6% in 2008-09. Though sales of the company JSPL, Tata Steel and GMDC increased, their profit percentage decreased from 2004-09 due to their decrease in net profit.

ROI of ACC Ltd. increased from 18.16% to 37.7% in five years due to substantial increase in its profit before tax. Similarly, ROI of GMDC increased marginally from 22.41% to 30.97% in five years. From 2004- 06, ROI of HZL increased from 43.04% to 83.30% and in 2009 it declined to 22.69%. ROI of Tata Steel was highest in 2004-05 with 74.57% and then it declined to 23.62%. Similarly ROI of JSPL decreased from 52.31% to 39.44%.

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